RECON

Biological Resource Report for the Spectrum Pedestrian Bridge Project San Diego, California

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TABLE OF CONTENTS

Acro	nyms	and Abbreviations	iii
Sum	mary		1
1.0	Intr	oduction	2
	1.1	Project Location	2
	1.2	Project Description	7
2.0	Met	hods and Survey Limitations	7
	2.1	General Biological Survey	
	2.2	Jurisdictional Waters Delineation	8
3.0	Reg	ulatory Setting	9
	3.1	Federal Regulations	
	3.2	State Regulations	10
	3.3	City Regulations	11
	3.4	Jurisdictional Waters	12
4.0	Exis	ting Conditions	
	4.1	Topography and Soils	13
	4.2	Vegetation Communities and Land Cover Types	13
	4.3	Wildlife	15
	4.4	Sensitive Biological Resources	16
5.0	MSC	CP Compliance	
	5.1	General Management Directives	
	5.2	MSCP Conditions for Covered Species	
6.0	Biol	ogical Protection General Requirements	
7.0	Proj	ect Impacts	
	7.1	Direct Impacts to Sensitive Vegetation Communities	
	7.2	Direct Impacts to Sensitive Plant Species	
	7.3	Direct Impacts to Sensitive Wildlife Species	
	7.4	Indirect Impacts to Sensitive Wildlife	31
	7.5	Direct Impacts to Open Space Easement	32
	7.6	Jurisdictional Waters/Wetlands	32
	7.7	Wildlife Corridors	
	7.8	Cumulative Impacts	
8.0	Miti	gation and Monitoring Measures	
9.0	Refe	erences Cited	

TABLE OF CONTENTS (cont.)

FIGURES

1:	Regional Location	. 3
2:	Project Location on USGS Map	. 4
3:	Project Location on City 800' Map	. 5
4:	Project Location on Aerial Photograph	. 6
5:	Existing Biological Resources and Project Impacts	14
6:	Existing Wetlands and Non-wetland Waters, and Project Impacts	21
7:	Wetland Buffers	23
8:	Project Location in Relation to Existing Open Space Easements	33

TABLES

1:	Vegetation Communities and Land Cover Types	.13
2:	Summary of Existing Jurisdictional Waters	.20
3:	Impacts to Vegetation Communities and Land Cover Types	.30

ATTACHMENTS

1: Plant Species Observed

- 2: Wildlife Species Observed
- 3: Sensitive Plant Species Observed or with the Potential to Occur
- 4: Sensitive Wildlife Species Occurring or with the Potential to Occur
- 5: Jurisdictional Waters Delineation Report for the Spectrum Pedestrian Bridge Project
- 6: Easement Exhibit

Acronyms and Abbreviations

ADD	Administrator Deputy Director
amsl	above mean sea level
BCME	Biological Construction Mitigation/Monitoring Exhibit
Cal-IPC	California Invasive Plant Council
CCC	California Coastal Commission
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFGC	California Game and Fish Code
CFR	Code of Federal Regulations
City	City of San Diego
CNDDB	California Natural Diversity Database
CSVR	Consultant Site Visit Record
\mathbf{ESL}	Environmentally Sensitive Lands
LCP	Local Coastal Plan
MBTA	Migratory Bird Treaty Act
MHPA	Multi-Habitat Planning Area
MMC	Mitigation Monitoring Coordination
MSCP	Multiple Species Conservation Program
NCCP	Natural Community Conservation Planning
OHWM	ordinary high water mark
project	Spectrum Pedestrian Bridge Project
RECON	RECON Environmental, Inc.
RWQCB	Regional Water Quality Control Board
SANDAG	San Diego Association of Governments
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

Summary

RECON Environmental, Inc. conducted a general biological survey for the Spectrum Pedestrian Bridge Project (project). The project is located in the city of San Diego community of La Jolla, east of North Torrey Pines Road, north of the northern terminus of Cray Court and south of Science Park Road. The project would span an urban canyon containing a mix of native and non-native vegetation, but does not occur within or adjacent to the City of San Diego Multi-Habitat Planning Area (MHPA). Additionally, it lies within the Coastal Overlay Zone. The survey area lies partially within an open space easement dedicated as part of the La Jolla Pines Technology Centre (City of San Diego 1992a). The open space easement was created on Map 12960 to preserve steep slopes within the La Jolla Pines Technology Center project, as discussed in that project's Environmental Impact Report (EQD No. 88-0244; City of San Diego 1989). The project applicant is in negotiations to gain access. A second open space easement occurs approximately 250 feet east of the project site. This second easement was dedicated by Carr America as biological mitigation for the previous La Jolla Spectrum project (DEP No. 89-0269; SCH No. 91071013; City of San Diego 1992b). The project would consist of building a box truss pedestrian bridge spanning over the canyon to connect the Spectrum 2 and 5 developments, as well as construction work areas necessary construct the bridge.

As part of the planning process for the project, a larger area, approximately 3.58 acres, was evaluated (survey area). Six vegetation communities occur within the survey area: southern riparian scrub, southern maritime chaparral, Diegan coastal sage scrub, eucalyptus woodland, disturbed land, and urban/developed land. Southern riparian scrub, southern maritime chaparral, and Diegan coastal sage scrub are considered sensitive vegetation communities. The project would cause a total of 0.32 acre of impacts, including 0.01 acre of southern maritime chaparral, a Tier I sensitive vegetation community. As the impact to sensitive vegetation communities would be less than 0.1 acre, it would be considered less than significant, and no mitigation would be required.

Two sensitive plant species, Nuttall's scrub oak (*Quercus dumosa*) and wart-stemmed ceanothus (*Ceanothus verrucosus*), were mapped within the survey area, and both species would not be impacted. In addition, planted Torrey pine (*Pinus torreyana*) trees also occur in the survey area; however, because this species was planted as landscaping, it is not considered sensitive.

Six sensitive wildlife species have moderate or high potential to occur on site. These include Belding's orange-throated whiptail (Aspidoscelis hyperythra beldingi), San Diegan tiger whiptail (Aspidoscelis tigris stejnegeri), red diamond rattlesnake (Crotalus ruber), coastal California gnatcatcher (Polioptila californica californica), southern California rufous-crowned sparrow (Aimophila ruficeps canescens), and southern mule deer (Odocoileus *hemionus fuliginata*). Southern mule deer is expected to disperse and avoid impacts during construction. Impacts to Belding's orange-throated whiptail, San Diegan tiger whiptail, and red diamond rattlesnake may occur but would be considered less than significant as the project would not affect local long-term survival of these species. Direct impacts to coastal California gnatcatcher and southern California rufous-crowned sparrow are not expected, and any indirect impacts from construction noise would be less than significant as the project site is located 1,400 feet outside the MHPA.

A formal jurisdictional waters delineation was conducted within the survey area in 2018 and updated in 2021 (RECON 2021a). The delineation identified wetland and non-wetland waters of the United States (U.S.) under U.S. Army Corps of Engineers (USACE) and wetland and non-wetland waters of the state under California Department of Fish and Wildlife (CDFW), and California Regional Water Quality Control Board (RWQCB) jurisdiction. It also identified the boundaries of wetlands as defined by the California Coastal Commission (CCC) and the City of San Diego. These wetland and non-wetland waters would not be directly impacted by the project, but the bridge would encroach on wetland buffers. During construction, silt fencing and all necessary erosion control measures would be installed within the impact footprint to prevent runoff or sedimentation into the drainage.

With implementation of the avoidance and mitigation measures described above, all project impacts would be reduced to below a level of significance.

1.0 Introduction

RECON Environmental Inc. (RECON) surveyed the Spectrum Pedestrian Bridge Project (project) and vicinity (cumulatively known as the survey area) to document existing biological conditions. This biological technical report has been prepared to evaluate the potential for sensitive biological resources; assess potential impacts from the proposed project; and discuss avoidance, minimization, and mitigation measures to reduce those impacts to below a level of significance.

1.1 **Project Location**

The proposed project is located in an urban canyon within the city of San Diego community of La Jolla (Figure 1). It lies east of North Torrey Pines Road, north of the northern terminus of Cray Court, and south of Science Park Road. It is within the Pueblo Lands of San Diego Land Grant on the U.S. Geological Survey (USGS) 7.5-minute topographical map series, Del Mar quadrangle (Figure 2; USGS 1994). The survey area is shown on the City of San Diego (City), Engineering and Development, 800' scale map, Number 266-1689 (Figure 3) and is primarily composed of undeveloped land bounded by industrial development to the north and south, and undeveloped land to the west and east (Figure 4). The survey area lies within the Coastal Overlay Zone and overlaps with an open space easement that was dedicated in fee to the City in 1992 per Map 12960 as part of the La Jolla Pines Technology Centre project (see Figure 4). Per the Land Use section of the La Jolla Pines Technology Center EIR (EQD 88-0244), the open space easement was created to preserve the steep slopes as part of the La Jolla Pines Technology Center and was not biological mitigation. A second open space easement that was previously recorded by Carr America in 1993 occurs approximately 250 feet to the east of the project site (see Figure 4). The project site is located entirely outside the City Multi-Habitat Planning Area (MHPA), which lies approximately 1,400 feet to the southeast.







FIGURE 1 Regional Location Map Source: USGS 7.5 minute topographic map series, Del Mar quadrangle, 1994, Pueblo Lands of San Diego Land Grant





RECON M:\JOBS5\9160\common_gis\fig2SB.mxd 12/17/2020 fmm FIGURE 2 Project Location on USGS Map



Survey Area



FIGURE 3 Project Location on City 800' Map





Survey Area Open Space Easement Recorded By CarrAmerica in 1993 Open Space Easement Recorded by Jolla Pines Technology Center Coastal Overlay Zone

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FIGURE 4 Project Location on Aerial Photograph

0

200

Feet

1.2 Project Description

The proposed project consists of a 164-foot span box truss pedestrian bridge, which would be constructed over a terminal finger canyon, providing foot access between the Spectrum 2 building at 3013 Science Park Road and the Spectrum 5 building at 3545 Cray Court. The bridge would be constructed of steel with an IPE decking, would have a minimum one-hour fire rating, and would meet Zone 1 brush management standards. The bridge would be suspended between two pile foundations, both of which are located outside the canyon. Soft LED lighting will be installed, facing down, from the top cross beams of the bridge, approximately 15 inches apart and under the handrail of the bridge. The IPE wood planks will be arranged with a thin spacing (approximately 7/16 inch) between planks. One pile foundation would be located on the northern slope at Spectrum 2 and another pile foundation would be located on the southern slope of the canyon at Spectrum 5. Grading would be required to install the bridge abutments/pile foundations.

A crane pad would be established within the proposed limits of work, outside the canyon. The bridge would be staged in three sections within the Spectrum 5 parking lot, and then lifted and set in place with the crane.

Landscaped foot paths would provide pedestrian access to the bridge. Minor grading may be conducted to flatten a route for the path from Spectrum 5. An existing dirt foot path would provide pedestrian access from Spectrum 2.

No construction activities would occur within the canyon. Appropriate best management practices, including construction fencing, silt fencing, and other erosion control measures would be installed along the inner edge of the impact footprint to contain all activities in the limits of work and prevent runoff or sedimentation into the canyon.

2.0 Methods and Survey Limitations

2.1 General Biological Survey

RECON biologist Brian Parker conducted a general biological survey for the project on April 16, 2020, between 9:15 a.m. and 12:15 p.m. The temperature during the survey was 65 degrees Fahrenheit, wind speed ranged from 0 to 4 miles per hour, and cloud cover was zero percent. Mr. Parker conducted a supplemental site visit on December 21, 2020, to verify site conditions in the current survey area. The survey area totaled 3.58 acres and encompassed the construction footprint, including all areas that would be cleared or graded, plus a sufficient area around these features to provide environmental context.

Vegetation communities were mapped on a 1-inch-equals-100-feet aerial photograph. The survey area included all project areas, including the bridge span, foundations, and access areas, plus a minimum 50-foot survey buffer into surrounding habitat. A reduced buffer was included for currently developed areas. Vegetation community classifications follow Holland

(1986) as modified by Oberbauer et al. (2008), with minor adjustments for consistency with the City's Biology Guidelines (City of San Diego 2018).

In addition to conducting field investigations, RECON conducted literature and database review for sensitive plant and animal species records within two miles of the project. Databases reviewed include the California Natural Diversity Database (CNDDB; California Department of Fish and Wildlife [CDFW] 2020a), the All Species Occurrences Database (U.S. Fish and Wildlife Service [USFWS] 2020), the County of San Diego's SanBIOS database (County of San Diego 2020), the California Native Plant Society [CNPS] Online database (CNPS 2020). Relevant literature reviewed includes the San Diego County Bird Atlas and Mammal Atlas (Unitt 2004; Tremor et al. 2017).

Plant species observed within the survey area were noted; however, a complete inventory of non-native ornamental species within developed and landscaped areas was not recorded. Plant nomenclature follows the Jepson Online Interchange (University of California 2020). In instances where common names were not provided in this resource, common names were obtained from Rebman and Simpson (2014), the U.S. Department of Agriculture (USDA; 2020a) or the Sunset Western Garden Book (Brenzel 2001).

All animal species observed directly or detected from calls, tracks, or other sign were recorded. Wildlife nomenclature follows the American Ornithological Society's Checklist (Chesser et al. 2019) and Unitt (2004) for birds; Baker et al. (2003) for mammals; Crother et al. (2017) for amphibians and reptiles; and San Diego Natural History Museum (2002) for butterflies.

Survey limitations were imposed by seasonal, temporal, and physical factors. The survey was conducted in mid-spring, so late-blooming annual plants and summer or fall migrant animals were not detectable or present. The survey was conducted in the morning, so nocturnal or crepuscular species were not active. Lastly, very high vegetation density and steep, uneven terrain made access to some areas difficult, although the biologist was able to access all areas where proposed direct impacts were anticipated (i.e., the access route and bridge foundation locations). Any inaccessible portions of the survey area were indirectly surveyed with the aid of binoculars.

2.2 Jurisdictional Waters Delineation

RECON biologist Beth Procsal performed an initial routine wetland delineation on August 14, 2018 and updated the delineation on July 30, 2021, following the guidelines set forth by the U.S. Army Corps of Engineers (USACE; 1987, 2008a, 2008b) to determine the presence and extent of wetlands and/or waters under the jurisdiction of USACE, CDFW, Regional Water Quality Control Board (RWQCB), California Coastal Commission (CCC), and/or the City. The survey area for the delineation was larger than that for the biological survey, as it included all of the Spectrum 2 and 5 parcels (RECON 2021a).

Wetlands were delineated using the following three parameters: hydrophytic vegetation, wetland hydrology such as the presence of seasonal flows and an ordinary high water mark

(OHWM), and hydric soils. According to the USACE, indicators for all three parameters must be present to qualify an area as a wetland. RWQCB waters of the state include all areas that meet one of three criteria (hydrology, hydric soils, or wetland vegetation) and generally include, but are not limited to, all waters under the jurisdiction of the USACE. The CDFW has jurisdiction over streambed and wetland habitats associated with watercourses, delineated by the outer edge of wetland vegetation or at the top of the bank of streams or lakes, whichever is wider. The CCC has jurisdiction over areas that meet one parameter of the USACE wetland definition. City wetlands include areas that support vegetation communities and overlap with areas mapped as wetland waters of the state.

To determine presence of hydrophytic vegetation, a direct search was conducted for wetland vegetation or areas dominant by wetland plant species, as defined by the National Wetland Plant List (Lichvar 2016). To determine the presence of wetland hydrology, hydrologic information for the site was obtained by reviewing USGS topographic maps and by directly observing hydrology indicators in the field. To determine the presence of hydric soils, sample points were selected within potential wetland areas and near the apparent boundary between wetland and upland. This boundary was inferred based on topography and changes in the composition of the vegetation. A complete list of hydric soil indicators is provided in the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008b). Information on the soil types sampled in the survey area is summarized from the Soil Survey for San Diego County (USDA 1973), the San Diego Association of Governments (SANDAG) 1995 geographic information system data (SANDAG 1995), and the USDA Hydric Soils of California list (hydric soil list; USDA 2020b).

Please refer to the Jurisdictional Waters/Wetland Delineation Report for a more detailed description of methods (RECON 2021a).

3.0 Regulatory Setting

3.1 Federal Regulations

3.1.1 Federal Endangered Species Act

The federal Endangered Species Act provides the legal framework for the listing and protection of species (and their habitats) identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered a "take" under the Endangered Species Act. Take of a federally listed threatened or endangered species is prohibited without a special permit. The Endangered Species Act allows for take of a threatened or endangered species incidental to development activities once a habitat conservation plan has been prepared to the satisfaction of the USFWS and an incidental take permit has been issued. The Endangered Species Act allows for the take of threatened or endangered species after consultation has deemed that development activities will not jeopardize the continued existence of the species. The

federal Endangered Species Act also provides for a Section 7 Consultation when a federal permit is required, such as a Clean Water Act Section 404 permit.

3.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA; 16 United States Code 703 et seq.) is a federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The number of bird species covered by the MBTA is extensive and is listed at 50 Code of Federal Regulations (CFR) 10.13. The regulatory definition of "migratory bird" is broad and includes any mutation or hybrid of a listed species and any part, egg, or nest of such birds (50 CFR 10.12). Migratory birds are not necessarily federally listed endangered or threatened birds under the Endangered Species Act. The MBTA, which is enforced by USFWS, makes it unlawful "by any means or in any manner, to pursue, hunt, take, capture, [or] kill" any migratory bird, or attempt such actions, except as permitted by regulation. The take, possession, import, export, transport, sale, purchase, barter, or offering of these activities is prohibited, except under a valid permit or as permitted in the implementing regulations (50 CFR 21.11). Compliance with the MBTA and all applicable federal and state laws pertaining to migratory and nesting birds is anticipated. Measures to ensure compliance with MBTA would be determined by the project biologist and may include pre-activity surveys, nest avoidance, and construction monitoring.

3.2 State Regulations

3.2.1 California Endangered Species Act

The California Endangered Species Act, similar to the federal Endangered Species Act, contains a process for listing of species and regulating potential impacts to listed species. State threatened and endangered species include both plants and wildlife but do not include invertebrates. The designation "rare species" applies only to California native plants. State threatened and endangered plant species are regulated largely under the Native Plant Preservation Act in conjunction with the California Endangered Species Act. State threatened and endangered animal species are legally protected against "take." The California Endangered Species Act authorizes CDFW to enter into a memorandum of agreement for take of listed species to issue an incidental take permit for a state-listed threatened and endangered species only if specific criteria are met.

3.2.2 California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires that biological resources be considered when assessing the environmental impacts that are the result of proposed actions. The lead agencies determine the scope of what is considered an impact and what constitutes an "adverse effect" on a biological resource.

3.2.3 Natural Community Conservation Planning Act

The Natural Community Conservation Planning (NCCP) Act is designed to conserve natural communities at the ecosystem scale while accommodating compatible land use. CDFW is the primary state agency that implements the NCCP. The NCCP plan provides for the comprehensive management and conservation of multiple wildlife species. It identifies and provides for regional protection of natural wildlife diversity while allowing for compatible and appropriate development and growth.

3.2.4 California Fish and Game Code

Section 3503 from the California Fish and Game Code (CFGC) applies to projects in the state. This section states that it is "unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto," and Section 3503.5 prohibits take, possession, or destruction of any birds in the orders Falconiformes (raptors) or Strigiformes (owls), or of their nests and eggs. Compliance with Sections 3503 and 3503.5 of the CFGC and all applicable federal and state laws pertaining to migratory and nesting birds is anticipated. Compliance measures would be determined by the project biologist prior to the start of construction and may include pre-activity surveys, nest avoidance, and construction monitoring.

3.3 City Regulations

3.3.1 Multiple Species Conservation Program

One of the primary objectives of the City's Multiple Species Conservation Program (MSCP) Subarea Plan is to identify and maintain a preserve system, which allows for animals and plants to exist at both the local and regional levels. The MSCP has identified large blocks of native habitat having the ability to support a diversity of plant and animal life known as "core biological resource areas." "Linkages" between these core areas provide for wildlife movement. These lands have been determined to provide the necessary habitat quality, quantity, and connectivity to sustain the unique biodiversity of the San Diego region. Input from responsible agencies and other interested participants resulted in creation of the City's MHPA. The MHPA is the area within which the permanent MSCP preserve would be assembled and managed for its biological resources.

3.3.2 City of San Diego Biology Guidelines

The City of San Diego Biology Guidelines (2018) were formulated to aid in the implementation and interpretation of the Environmentally Sensitive Lands Regulations (ESL), San Diego Land Development Code, Chapter 14, Division 1, Section 143.0101. Section III of the Guidelines (Biological Impact Analysis and Mitigation Procedures) also serve as standards for the determination of impacts and mitigation under CEQA. The ESL defines sensitive biological resources as those lands included within the MHPA as identified in the City of San Diego's MSCP Subarea Plan (City of San Diego 1997), and other lands

outside of the MHPA that contain wetlands; vegetation communities classifiable as Tier I, II, IIIA or IIIB; habitat for rare, endangered or threatened species; or narrow endemic species.

3.3.3 California Coastal Act

The California Coastal Act protects environmentally sensitive areas "in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments." Per the California Coastal Act, the entire project site is identified within the Coastal Overlay Zone. The CCC is responsible for protecting the natural resources, including coastal wetlands, within the coastal zone. The City has an approved Local Coastal Plan (LCP), which is used to guide development within the Coastal Overlay Zone. Application of City regulations to protect environmentally sensitive areas and ensure consistency with the MSCP as described in this report would ensure consistency with the City's LCP.

3.4 Jurisdictional Waters

All wetland areas, including vernal pools, and non-wetland waters of the U.S. are considered sensitive. Wetlands and non-wetland waters are under the jurisdiction of the USACE. Streambeds and associated wetland vegetation are under the jurisdiction of the CDFW. The RWQCB takes jurisdiction over all the same areas as USACE and most surface waters. The CCC has jurisdiction over any wetlands within the coastal zone.

The City of San Diego Municipal Code defines wetlands as areas that meet one or more of the following conditions (City of San Diego 2018):

- 1. Areas that persistently or periodically contain naturally occurring wetland vegetation communities characteristically dominated by hydrophytic vegetation;
- 2. Areas that have hydric soils or wetland hydrology and lack naturally occurring wetland vegetation communities because human activities or catastrophic natural events have removed the historic wetland vegetation;
- 3. Areas lacking wetland vegetation communities, hydric soils and wetland hydrology due to non-permitted filling of previously existing wetlands; or
- 4. Areas mapped as wetlands on Map No. C-713 as shown in Chapter 13, Article 2, Division 6 (Sensitive Coastal Overlay Zone).

4.0 Existing Conditions

4.1 Topography and Soils

Topography within the survey area is very steep, with elevations ranging from 290 feet above mean sea level (amsl) at the canyon bottom in the eastern portion of the site to 364 feet amsl on the developed pad in the southern portion of the site. Two soil types, Altamont clay, 30 to 50 percent slopes and Chesterton fine sandy loam, 9 to 15 percent slopes, as mapped by the USDA (1973), occur within the survey area.

Altamont soils are well-drained clay soils formed in material weathered from calcareous shale. The soils on site are 20 to 32 inches deep over shale. Runoff is rapid and the erosion hazard is high. The available water-holding capacity is 3.5 to 5 inches (USDA 1973). Altamont clay soil is present through most of the survey area, including most of the steep canyon.

Chesterton soils are moderately well drained, very slowly permeable soils on uplifted marine sediments and old terraces. They are gently sloping to moderately steep. The water holding capacity is 2.5 to 4.5 inches. Runoff is medium and the erosion hazard is moderate (USDA 1973). This soil type occurs in the upper portion of the slope and the developed pad in the southern portion of the site.

4.2 Vegetation Communities and Land Cover Types

Six vegetation communities occur within the survey area: southern riparian scrub, southern maritime chaparral, Diegan coastal sage scrub, eucalyptus woodland, disturbed land, and urban/developed land. The acreage of each vegetation community is presented in Table 1 and shown in Figure 5. The tier for each vegetation community and land cover type is from the City's Biology Guidelines (City of San Diego 2018). A list of plant species observed is provided in Attachment 1.

Table 1Vegetation Communities and Land Cover Types				
City of San Diego				
Vegetation Community	Tier	Acres		
Southern riparian scrub	NA	0.06		
Southern maritime chaparral	Ι	0.63		
Diegan coastal sage scrub	II	0.41		
Eucalyptus woodland	IV	0.28		
Disturbed land	IV	0.01		
Urban/developed	NA	2.19		
TOTAL 3.58				
NA: These areas have not been assigned City of San Diego Tiers.				



🔲 Survey Area **Project Parcels** - Site Plan 🔼 Limit of Work/Impacts 🔜 Southern Riparian Scrub Bridge Abutment

Vegetation Communities

- Diegan Coastal Sage Scrub
 - Southern Maritime Chaparral
- Eucalyptus Woodland
 - **Disturbed Land**
 - Urban/Developed

Wart-stemmed Ceanothus (Ceanothus verrucosus)

Feet

100

Nuttall's Scrub Oak (Quercus dumosa)

Λ

FIGURE 5 **Existing Biological Resources** and Project Impacts

RECO M:\JOBS5\9160\common_gis\fig5SB.mxd 09/21/2021 bma Southern riparian scrub is a wetland vegetation community and has not been assigned a City of San Diego Tier (City of San Diego 2018). This vegetation community occurs at the western edge of the survey area. It consists of several arroyo willows (*Salix lasiolepis*) growing just east of a storm drain outlet on the side and bottom of a steep-sided canyon. The willows appear to be dependent on irrigation and other flows from the storm drain.

Southern maritime chaparral is a Tier I habitat under the City's Biology Guidelines (City of San Diego 2018). Within the survey area, this vegetation community is dominated by large (six or more feet in height) shrubs, including Nuttall's scrub oak (*Quercus dumosa*), chamise (*Adenostoma fasciculatum*), lemonadeberry (*Rhus integrifolia*), and mission manzanita (*Xylococcus bicolor*). The maritime chaparral occurs at the canyon bottom and the north-facing-facing slope in the southern portion of the site. The vegetation is dense and tall, with cover between 80 and 100 percent. Some portions of the southern maritime chaparral were inaccessible due to steep slopes and very dense vegetation.

Diegan coastal sage scrub is a Tier II habitat under the City's Biology Guidelines (City of San Diego 2018). It occurs in the south-facing slope in the northern portion of the site. Vegetation cover is patchy, with patches ranging from 30 to 70 percent cover. This vegetation community is dominated by deerweed (*Acmispon glaber*), lemonadeberry, black sage (*Salvia mellifera*), California encelia (*Encelia californica*), California sagebrush (*Artemisia californica*), and San Diego viguiera (*Bahiopsis laciniata*). In addition, there are a number of San Diego barrel cactus (*Ferocactus viridescens*) scattered throughout this vegetation community (see Figure 5).

Disturbed land is a Tier IV habitat under the City's Biology Guidelines (City of San Diego 2018). This vegetation community occurs along the edge of the Spectrum 5 development in the southern portion of the survey area. It is dominated by weedy, non-native grasses, with occasional ornamental species such as vanilla-scented wattle (*Acacia redolens*).

Eucalyptus woodland is a Tier IV habitat under the City's Biology Guidelines (City of San Diego 2018). This vegetation community consists of several species of gum trees (*Eucalyptus* sp.) planted along the western edge of the survey area.

Urban/developed land has not been assigned a tier under the City's Biology Guidelines (2018) and is not considered a sensitive vegetation community. Within the survey area, it occurs in areas with existing buildings and associated parking lots, landscaping, and walkways.

4.3 Wildlife

A total of 17 wildlife species were detected during the biological survey. These species are typical of coastal sage scrub, chaparral, and urban/wildland interfaces areas in San Diego County. Attachment 2 provides a complete list of wildlife species observed within the survey area.

4.4 Sensitive Biological Resources

4.4.1 Sensitivity Criteria

For purposes of this report, plant and animal species will be considered sensitive if they are:

- 1. Listed by state or federal agencies as threatened or endangered or are proposed for listing;
- 2. Designated by the City as a narrow endemic species (City of San Diego 1997, 2018);
- 3. Covered species under the MSCP (City of San Diego 1997) or Vernal Pool Habitat Conservation Plan (City of San Diego 2017);
- 4. Given a California Rare Plant Rank (CRPR) 1B (considered endangered throughout its range), 2 (considered endangered in California but more common elsewhere), 3 (more information about the plant's distribution and rarity needed), or 4 (plants of limited distribution) in the CNPS Inventory of Rare and Endangered Plants of California (2020);
- 5. Considered rare, endangered, or threatened by CDFW (2019 and 2020b); or
- 6. Identified by another recognized conservation or scientific group as being depleted, potentially depleted, declining, rare, critical, endemic, endangered, or threatened.

As stated in the City's Biology Guidelines (City of San Diego 2018) and noted in Section 3.3 above, a survey area is considered to contain ESL if any of the following conditions are met:

- 1. The site has been identified as part of the MHPA by the City's MSCP Subarea Plan or the Vernal Pool Habitat Conservation Plan. MHPA lands are those that have been included within the City's MSCP Subarea Plan for habitat conservation. These lands have been determined to provide the necessary habitat quality, quantity, and connectivity to sustain the unique biodiversity of the San Diego region. MHPA lands are considered by the City to be a sensitive biological resource.
- 2. The site supports Tier I, II, or IIIA and IIIB vegetation communities (such as grassland, chaparral, coastal sage scrub, etc.). The CEQA determination of significant impacts may be based on what was on the site (e.g., if illegal grading or vegetation removal occurred, etc.), as appropriate.
- 3. The site contains, or comes within 100 feet of, a natural drainage.
- 4. The site occurs within the 100-year floodplain established by the Federal Emergency Management Agency or the floodplain/floodway zones.
- 5. The site has potential to provide habitat for threatened, endangered, or otherwise protected wildlife species.

Jurisdictional Waters: All wetland areas, including vernal pools, and non-wetland waters of the U.S. are considered sensitive. Wetlands and non-wetland waters are under the jurisdiction of the USACE. Streambeds and associated wetland vegetation are under the jurisdiction of the CDFW. The RWQCB takes jurisdiction over all the same areas as USACE and most surface waters.

The City of San Diego Municipal Code defines wetlands as areas that meet one or more of the following conditions (City of San Diego 2018):

- 1. Areas that persistently or periodically contain naturally occurring wetland vegetation communities characteristically dominated by hydrophytic vegetation;
- 2. Areas that have hydric soils or wetland hydrology and lack naturally occurring wetland vegetation communities because human activities or catastrophic natural events have removed the historic wetland vegetation;
- 3. Areas lacking wetland vegetation communities, hydric soils and wetland hydrology due to non-permitted filling of previously existing wetlands; or
- 4. Areas mapped as wetlands on Map No. C-713 as shown in Chapter 13, Article 2, Division 6 (Sensitive Coastal Overlay Zone).

4.4.2 Sensitive Vegetation Communities

Three sensitive vegetation communities occur within the survey area: southern riparian scrub, southern maritime chaparral (Tier I), and Diegan coastal sage scrub (Tier II). The locations of these vegetation communities are shown on Figure 5.

4.4.3 Sensitive Plant Species

The survey area contains two species that are considered sensitive: Nuttall's scrub oak and wart-stemmed ceanothus. In addition, several Torrey pines have been planted as landscaping along the southwestern edge of the survey area. Landscaped plants are not considered sensitive and would not require mitigation if impacted.

Nuttall's scrub oak and wart-stemmed ceanothus are discussed below. All state or federally listed species and City of San Diego narrow endemic and covered plant species known to occur within two miles of the survey area, or that have potential to occur based on habitat requirements and range, are addressed in Attachment 3.

4.4.3.1 Nuttall's Scrub Oak

Nuttall's scrub oak is a CRPR 1B.1 species (CNPS 2020) but is not state or federally listed and is not an MSCP covered species. A single individual was mapped along the western edge of the survey area. Additional Nuttall's scrub oak shrubs occur throughout the southern maritime chaparral to the east of the survey area.

4.4.3.2 Wart-stemmed Ceanothus

Wart-stemmed ceanothus is an MSCP covered species and has a CNPS rare plant ranking of 2B.2. One wart-stemmed ceanothus was found within the project site (see Figure 5). In addition, this species has been observed in the southern maritime chaparral habitat outside the survey area to the east.

4.4.4 Sensitive Wildlife Species

No sensitive wildlife species were detected in the survey area; however, six sensitive wildlife species have moderate or high potential to occur on site. These include Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*), San Diegan tiger whiptail (*Aspidoscelis tigris stejnegeri*), red diamond rattlesnake (*Crotalus ruber*), coastal California gnatcatcher (*Polioptila californica californica*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), and southern mule deer (*Odocoileus hemionus fuliginata*). Each of these is discussed below, and all state or federally listed species and City MSCP-covered animal species known to occur within two miles of the survey area, or that have potential to occur based on habitat requirements and range, are addressed in Attachment 4.

4.4.4.1 Belding's Orange-throated Whiptail

Belding's orange-throated whiptail is a CDFW watch list species (CDFW 2019) and an MSCPcovered species (City of San Diego 1997). This species ranges from the coast to the Peninsular mountain ranges from Orange and southwestern San Bernardino counties to the tip of Baja California, Mexico (Stebbins 2003). It occurs in a variety of habitats and is most common in sandy areas of low, open sage scrub or chaparral, particularly where there is California buckwheat, sage (*Salvia* spp.), or chamise (*Adenostoma fasciculatum*; Lemm 2006). This species feeds primarily on the western subterranean termite (*Reticulitermes hesperus*; Bostic 1966). Although there are no database records of this species within two miles of the survey area (CDFW 2020a; USFWS 2020, County of San Diego 2020), there is suitable habitat on the survey area. This species is not particularly sensitive to human disturbances and is often found in urban canyons like that surrounding the survey area. Thus, this species has moderate potential to occur within the Diegan coastal sage scrub and southern maritime chaparral on site.

4.4.4.2 San Diegan Tiger Whiptail

San Diegan tiger whiptail is a CDFW species of special concern (CDFW 2019) but is not an MSCP covered species. The San Diegan tiger whiptail ranges predominantly on the coastal slope from Santa Barbara County south into northwestern Baja California, Mexico (Stebbins 2003). In San Diego County, San Diegan tiger whiptail occurs in coastal sage scrub and chaparral, as well as in woodlands and streamsides. This species has moderate potential to occur within open areas of the Diegan coastal sage scrub and adjacent ornamental areas. Although much of the survey area contains dense vegetation, there are occasional openings in the habitat, and the surrounding canyon has ample habitat for this species.

4.4.4.3 Red Diamond Rattlesnake

The red diamond rattlesnake is a CDFW species of special concern (CDFW 2019) but is not an MSCP covered species. It occurs from sea level to about 4,000 to 5,000 feet on both sides of the Peninsular Ranges from southern San Bernardino County south through western Riverside and San Diego counties to Baja California, Mexico (Jennings and Hayes 1994). It inhabits coastal sage scrub, chaparral, and pinyon–juniper woodland particularly where there are abundant rock outcrops (Jennings and Hayes 1994; Lemm 2006). This species is active year-round with peak activity occurring in April and May, and breeding from February through September (Jennings and Hayes 1994). Its diet consists principally of small mammals, lizards, birds, and other snakes. Although there are no database records of this species within two miles of the survey area (CDFW 2020a; USFWS 2020, County of San Diego 2020), there is suitable habitat within the coastal sage scrub and southern maritime chaparral. Thus, this species has moderate potential to occur within the survey area.

4.4.4 Coastal California Gnatcatcher

The coastal California gnatcatcher is federally listed as threatened, a CDFW species of special concern, and an MSCP-covered species (CDFW 2019; City of San Diego 2018). It is a non-migratory, resident species found on the coastal slopes of southern California from Ventura County into Baja California, Mexico (Atwood and Bontrager 2001; USFWS 2010). It occurs in mature coastal sage scrub habitat (Atwood and Bontrager 2001), where it nests most commonly in California sagebrush, but also uses California buckwheat, California encelia, and broom baccharis (Baccharis sarothroides; Unitt 2004). The Diegan coastal sage scrub on-site is moderately suitable, as it contains moderate-sized California sagebrush, California encelia, and San Diego viguiera. The southern maritime chaparral is largely unsuitable as it is dominated by large shrubs that are not generally used by coastal California gnatcatcher. All suitable coastal California gnatcatcher habitat on-site lies outside the MHPA. While it was not detected during biological surveys in 2020, RECON detected this species by vocalizations during 2018 biological surveys in the project vicinity, but also outside the MHPA (RECON 2018). The Diegan coastal sage scrub on-site lacks an abundance of California sagebrush, but other shrub species present could also be used for nesting. In addition, the habitat on-site is connected to large areas of suitable habitat within the surrounding canyon system. This species has moderate potential to occur in the Diegan coastal sage scrub on site.

4.4.5 Southern California Rufous-crowned Sparrow

The southern California rufous-crowned sparrow is a CDFW watch list species and an MSCPcovered species (CDFW 2019; City of San Diego 2018). It ranges throughout southern California from Los Angeles County to Baja California (Collins 1999). Southern California rufous-crowned sparrow occurs in sage scrub, burned chaparral, and grasslands with scattered shrubs. The species exhibits a strong preference for moderate to steep, south-facing, dry, rocky slopes with a 50 percent cover of low shrubs (Unitt 2004; Collins 1999). Breeding occurs from March through June (Collins 1999) and nests are generally placed at or near the base of low shrubs or native bunch grasses (Unitt 2004). The coastal sage scrub on-site provides suitable nesting habitat for this species; however, the southern maritime chaparral is too tall to provide suitable nesting habitat. This species has been reported in similar, though possibly more open, coastal sage scrub habitat on the slopes east of Interstate 5, approximately one mile northeast of the site (CDFW 2020a). Thus, it has moderate potential to occur on site.

4.4.4.6 Southern Mule Deer

The southern mule deer is an MSCP-covered species (City of San Diego 2018). It is widespread throughout undeveloped portions of San Diego County, from Camp Pendleton to the Laguna Mountains, Sweetwater River, and Otay Lakes at elevations of 400 to 3,600 feet amsl. Resident and migratory populations are present throughout California. This species requires relatively large, undisturbed tracts of chaparral, coastal sage scrub, and mixed grassland/shrub habitats. Although no mule deer sign was detected during the current survey, RECON identified mule deer scat during 2015 biological surveys in the project vicinity for the Spectrum 3 and 4 project (RECON 2016). Thus, this species is considered to have a high potential to occur on the survey area.

The MSCP does not include conditions for coverage for southern mule deer, as at least 105,000 acres of its habitat were protected in the City's MHPA and County of San Diego habitat preserves.

4.4.5 Jurisdictional Waters/Wetlands

The location of jurisdictional wetlands and waters are shown on Figure 6 and a summary of the acreages of jurisdictional waters is provided in Table 2. As specified above, in areas not accessible due to dense vegetation, the channel connection was estimated and not part of the total jurisdiction waters. As noted above, the survey area for the jurisdictional delineation was larger than that for the biological survey, as it included all of the Spectrum 2 and 5 parcels (RECON 2021a; Attachment 5). Thus, the jurisdictional acreages presented below are less than those presented in the jurisdictional delineation report (RECON 2021a).

Table 2Summary of Existing Jurisdictional Waters			
Agency	Jurisdictional Wetlands/Waters	Acres	
UCACE	Non-wetland waters of the U.S.	0.10 (4,291 sf)	
USACE	Total Waters of the U.S.	0.10 (4,291 sf)	
	Riparian wetlands	0.06 (2,778 sf)	
CDFW/RWQCB*	Streambeds	0.10 (4,291 sf)	
	Total Waters of the State	0.16 (7,069sf)	
CCC	Wetlands	0.06 (2,776 sf)	
City of San Diego	Wetlands	0.06 (2,776 sf)	
*Includes all USACE jurisdictional waters.			
sf = square feet			



- CDFW/RWQCB Streambed
- CDFW/RWQCB/CCC/City Wetland
- **Flow** Direction

FIGURE 6 Existing Wetlands and Non-wetland Waters, and Project Impacts

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Limit of Work/Impacts

Bridge Abutment

4.4.5.1 USACE Waters of the U.S.

Potential USACE jurisdictional areas considered to be non-wetland waters consist of an ephemeral drainage channel that flows onto the properties from a small culvert from the adjacent developments to the west. The non-wetland waters mapped in the survey area total 0.10 acre and were estimated by observations and measurements of the OHWM, including low flow channels and active floodplain. Based on the delineation, there are no likely USACE wetland waters within the survey area – the southern willow scrub does not meet all three wetland parameters to meet the USACE definition of a wetland (RECON 2021a).

4.4.5.2 CDFW Waters of the State

Potential waters of the State under the jurisdiction of CDFW include the ephemeral streambed and the southern riparian scrub. The limits of the CDFW streambed are delineated from the top of the bank (see Figure 5). A total of 0.10 acre of CDFW streambeds and 0.06 acre of wetlands were mapped within the survey area.

4.4.5.3 RWQCB Jurisdictional Waters of the State

The RWQCB takes jurisdiction over all waters of the state and all waters of the U.S. as mandated by both the federal Clean Water Act and the California Porter-Cologne Water Quality Control Act. The extent of potential RWQCB jurisdiction in this case is the same as the limits of the waters of the state and include 0.06 acre of wetland and 0.10 acre of nonwetland waters of the state.

4.4.5.4 CCC Wetlands

Wetlands anticipated to be under CCC jurisdiction include the 0.06-acre patch of southern riparian scrub, the same as the limits of the CDFW riparian wetland.

4.4.5.5 City of San Diego Wetlands

A single patch of City wetlands occurs in the survey area. This area consists of 0.06 acre of southern riparian scrub along a drainage in the western edge of the survey area.

Wetland Buffers

The City Biology Guidelines require buffers to protect the functions and values of wetlands. Within the coastal zone, a wetland buffer of 100 feet is required. Factors to be considered in the deviation request include an evaluation of wetland functions and values based on biological, hydrologic, and water quality criteria. These factors are discussed below.

Under current conditions, the minimum buffer width for the wetland habitats is 30 feet, as the southern riparian scrub occurs just east of an existing parking lot (Figure 7). The wetland buffer extends 140 feet north to the Spectrum 1 development, approximately 92 feet northeast to the Spectrum 2 development, and 212 feet southeast to the Spectrum 5 development. There are no restrictions to the buffer to the east.





Project Parcels

Site Plan

RECON

Limit of Work/Impacts

Bridge Abutment

Wetland Buffer Existing Buffer Width Reduced Buffer Width

> FIGURE 7 Wetland Buffers

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Biological Functions

There is little existing buffer between the riparian habitat and the parking lot to the west, as a parking lot for an adjacent medical development occurs 30 feet to the west, and the intervening area consists of landscaping. This landscaped area provides poor habitat for native plant and animal species.

The habitat in the buffer areas to the north and east consist of native habitats consisting of southern maritime chaparral and Diegan coastal sage scrub. The habitats are moderate quality for wildlife, and have a moderate potential to support sensitive species such as Belding's orange-throated whiptail, San Diegan tiger whiptail, red diamond rattlesnake, coastal California gnatcatcher, southern California rufous-crowned sparrow, and southern mule deer (see Section 4.4.4). These areas also provide habitat for other reptiles, rodents, insects, and small animals, which, in turn, provide food chain value for birds in the riparian habitat.

To the southeast, the existing buffer is approximately 212 feet. This area consists of 10-footwide strip of southern maritime chaparral, followed by eucalyptus woodland, with the remainder consisting of more southern maritime chaparral. The southern maritime chaparral may provide habitat for a similar suite of species as noted above. The eucalyptus woodland consists of a cluster of exotic gum trees with an understory of landscaping shrubs. This area provides low-quality habitat for wildlife, although there may be some marginal value for raptors in the canopy of the trees.

Hydrologic Functions

Wetland buffers provide hydrologic value for the associated wetlands through providing natural drainage and controlling erosion, sedimentation, and salinity. The water source into the wetland and buffer areas is runoff from parking lots and other hardscape, as well as landscaping irrigation. The riparian habitat occurs along a narrow, steep-sided canyon, approximately 30 feet below the existing developments and the project site. It is supported by urban runoff and irrigation water flowing from the parking lot and storm drain to the west. These features provide no sediment or drainage control. Little to no runoff enters the riparian area from the north or south, as most flows would drain naturally into existing swales or channels downstream, east of the wetland. Thus, the current buffer between the existing developments and the riparian area provides little hydrologic benefit to the wetland habitat.

Water Quality Functions

Water quality functions provided by wetland buffers include water storage, groundwater recharge, and water purification. As noted above, little water from the north or south flows into the riparian habitat providing minimum water quality function. Virtually all of the water supporting the riparian habitat is from irrigation and precipitation runoff from the parking lot to the west. This water enters an existing storm drain, which provides little water quality function or benefit before releasing flows directly into the riparian habitat.

The portions of the wetland buffers outside the canyon, including the project limits of work, are elevated approximately 30 feet above the wetlands and provide minimal water filtration and purification, as most water in these areas would enter urban storm drains or run by sheet flow into the canyon. However, these areas likely contribute little to water storage or groundwater recharge functions. The buffer areas within the canyon to the east likely provide higher functions for water storage, groundwater recharge, and filtration.

4.4.6 Multi-Habitat Planning Area

The survey area is located entirely outside the MHPA, with the nearest segment of the MHPA located approximately 1,400 feet to the southeast.

4.4.7 Wildlife Movement Corridors

Wildlife movement corridors are areas that connect suitable wildlife habitat areas in a region otherwise fragmented by rugged terrain, changes in vegetation, or human disturbance. Natural features such as canyon drainages, ridgelines, or areas with vegetation cover provide corridors for wildlife travel. Wildlife movement corridors are important, because they provide access to mates, food, and water; allow the dispersal of individuals away from high population density areas; and facilitate the exchange of genetic traits between populations (Beier and Loe 1992). Wildlife movement corridors are considered sensitive by resource and conservation agencies.

The project spans a canyon that is connected to a larger urban canyon system south of the survey area. Although it is reasonable to assume that wildlife may move locally through this canyon, the site is ultimately restricted by development and paved roads in all directions, including Interstate 5, Interstate 805, Genesee Avenue, North Torrey Pines Road, and Carmel Valley Road. Furthermore, the survey area is not designated as a MSCP regional wildlife corridor as it does not provide a throughway for wildlife species by connecting with major areas of off-site habitat. Thus, the canyon likely represents a local corridor for wildlife movement but does not function as a regional corridor.

4.4.8 **Open Space Easements**

As mentioned in Section 1.1, the survey area overlaps with an open space easement previously recorded as part of the La Jolla Pines Technology Centre in 1992 (Map No. 12960; TM 88-0244; File No. 92-509036, City of San Diego 1992a; see Figure 4). Per the Land Use section of the La Jolla Pines Technology Center EIR (EQD 88-0244), the open space easement was created to preserve the steep slopes as part of the La Jolla Pines Technology Center. Within the easement is series of concrete walls, stairs, and walkways that appear to date to the 1930s and that may have been associated with an agricultural station (RECON 2021b). The proposed encroachment (0.07 acre) will not change or impact the open space character (i.e., the steep slopes within) of the easement area. The proposed bridge and pathway have been designed to avoid such impacts and will require grading in the form of clearing and grubbing and do not entail any significant landform alteration. The applicant is negotiating with the City for access to this easement.

A second easement dedicated by Carr America in 1993 as part of the La Jolla Spectrum project is located outside of the project site, approximately 250 feet to the east (Final Environmental Impact Report DEP No. 89-0269, SCH No. 91071013, City of San Diego 1992b). This second open space represents part of the La Jolla Spectrum project's biological mitigation.

5.0 MSCP Compliance

The nearest segment of the MHPA is located approximately 1,400 feet to the southeast of the project site. Therefore, the project would not cause direct impacts to the MHPA and project activities are not anticipated to result in indirect impacts to the MHPA. Therefore, the MHPA Land Use Adjacency Guidelines, described in provided in Section 1.4.3 of the MSCP (City of San Diego 1997) are not anticipated to apply. In addition. Section 1.5.8 of the MSCP does not include any specific management policies or directives for the project area. Therefore, this section addresses General Management Directives per Section 1.5.2 of the MSCP and conditions of coverage for MSCP covered species with at least moderate potential to occur.

5.1 General Management Directives

Section 1.5.2 of the MSCP provides general management directives related to (1) mitigation, (2) restoration, (3) trails, public access, and recreation, (4) trash/litter and materials storage; (5) adjacency management issues, (6) invasive species control and removal, and (7) flood control. Project consistency with these guidelines is summarized and addressed below.

5.1.1 Mitigation

The MSCP requires that any mitigation be performed in accordance with the City's ESL regulations and Biology Guidelines (City of San Diego 2018). Project impacts and mitigation are discussed in Section 7 and Section 8, respectively. Impacts to sensitive vegetation communities would be less than 0.1 acre, so they would be less than significant and require no mitigation per the City's ESL regulations and Biology Guidelines (City of San Diego 2108).

5.1.2 Restoration

The MSCP requires that any restoration or revegetation within the MHPA be performed in a manner acceptable to the City. The project is located entirely outside the MHPA and as discussed in Section 6 below. Impacts to native vegetation communities would be less than significant, so no mitigation is proposed or required. While no restoration is required or proposed, the project landscaping plans do propose revegetation of areas disturbed by the project outside the permanent bridge abutments.

5.1.3 Public Access, Trails, and Recreation

The MSCP provides management priorities where projects propose public access or trails within the MHPA. While the proposed bridge would span the undeveloped canyon, it would not occur within the MHPA and no new trails or other public access to the habitat areas would be created. The proposed bridge footings would be located largely within the least sensitive vegetation in the survey area. No new equestrian trails, pedestrian trails, or offroad-vehicle trails would be created. The proposed project would not encourage unauthorized access into surrounding habitat.

5.1.4 Litter/Trash and Materials Storage

The MSCP provides management measures to control litter and trash in natural areas, including the MHPA. The project is located entirely outside the MHPA and the proposed bridge is not expected to result in an increase in trash or dumping into the surrounding habitat. The Spectrum 2 and 5 buildings to the north and south would have trash receptacles that are regularly emptied by maintenance staff.

5.1.5 Adjacency Management Issues

The MSCP provides guidelines related to management and monitoring requirements for projects adjacent to the MHPA. As noted above, the project is entirely outside the MHPA. In addition, there would be visual (e.g., hedges and established pathways) as well as physical (railings and steep slopes) to discourage unauthorized access into the surrounding habitat areas.

5.1.6 Invasive Exotics Control and Removal

The MSCP provides management guidelines to control and remove exotic species within the MHPA. The project lies outside the MHPA and the project is not expected to increase invasive species encroachment into the surrounding areas. Non-native invasive plant species are currently already present within the survey area, including within the canyon. Moreover, project landscaping plans would not include any species identified as "high" by the Cal-IPC Invasive Plant Inventory Database (Cal-IPC 2020).

5.1.7 Flood Control

No existing flood control channels occur within the survey area. A small ephemeral drainage occurs at the canyon bottom and would not be impacted. There is a storm drain system and concrete brow ditches directing flow from the developed areas and the detention basin into the drainage. The project is not expected to substantially increase flows into the drainage system or affect flood control in the canyon.

5.2 MSCP Conditions for Covered Species

Five MSCP covered species have potential to occur in the survey area: Belding's orangethroated whiptail, coastal California gnatcatcher, southern California rufous-crowned sparrow, and southern mule deer. The MSCP includes conditions for coverage Belding's orange-throated whiptail, coastal California gnatcatcher, and southern California rufouscrowned sparrow. Consistency with these conditions is addressed below.

Specific guidelines for managing and monitoring covered species and their habitats, including following best management practices. As stated in the MSCP, edge effects may include (but are not limited to) trampling, dumping, vehicular traffic, competition with invasive species, parasitism by brown-headed cowbirds, predation by domestic animals, noise, collecting, recreational activities, and other human intrusion (City of San Diego 1997).

5.2.1 Wart-stemmed Ceanothus

The MSCP conditions for coverage of wart-stemmed ceanothus require area-specific management directives to increase known populations, and to reduce the risk of catastrophic fire.

The project is located 1,400 feet from the nearest segment of the MHPA and is not expected to substantially increase the risk of catastrophic fire in the surrounding habitat or to any segment of the MHPA, so it would not conflict with conditions for coverage of wart-stemmed ceanothus.

5.2.2 Belding's Orange-throated Whiptail

The MSCP condition for coverage of Belding's orange-throated whiptail requires measures to address edge effects.

The proposed project is not expected to substantially increase edge effects, as it would not impact the MHPA. Additionally, the bridge is elevated 30 feet above the habitat below which acts as a topographical barrier from the habitat outside of the MHPA. Any pedestrian use of the bridge would not result in trampling or introduction of invasive species, or any form of edge effects. Therefore, the project would comply with the condition for coverage for this species.

5.2.3 Coastal California Gnatcatcher

Conditions for coverage of coastal California gnatcatcher require management directives to reduce edge effects, minimize disturbance during the breeding season (March 1 to August 15), reduce the potential for habitat degradation from fire, and maintain or improve habitat quality. Additionally, no vegetation clearing is allowed in occupied habitat within the MHPA during the breeding season.

The project lies 1,400 feet outside the MHPA, so edge effects would be minimal and fire risk within the MHPA would not be affected. As stated above, the fact that the bridge is elevated 30 feet above the habitat would preclude edge effects such as habitat degradation that may indirectly impact this species. Therefore, the project would comply with the conditions for coverage for this species.

5.2.4 Southern California Rufous-crowned Sparrow

The condition for coverage of southern California rufous-crowned sparrow requires maintenance of dynamic processes, such as fire, to perpetuate open phases of coastal sage scrub with herbaceous components.

The proposed project lies 1,400 feet outside from the MHPA and would not alter any dynamic processes, such as fire, within coastal sage scrub in the MSCP. Therefore, the project would comply with the conditions for coverage for this species.

6.0 Biological Protection General Requirements

The project would be required to comply with federal, state, and City regulations, including avoidance of impacts to nesting bird species. To ensure compliance with these regulations and minimize or avoid impacts to sensitive biological resources, a qualified biological monitor will be retained. The biological monitor will attend the pre-construction meeting, be present during construction as needed to prevent impacts to protected avian species (including coastal California gnatcatcher), educate construction personnel, and coordinate with and report to the City's Mitigation Monitoring Coordination (MMC) section. These measures will be spelled out as conditions of approval for the project.

7.0 Project Impacts

Project impacts were analyzed according to the City's Biology Guidelines (City of San Diego 2018) and Significance Determination Thresholds (City of San Diego 2016). Direct and indirect impacts are discussed below.

7.1 Direct Impacts to Sensitive Vegetation Communities

Project implementation would impact a total 0.32 acre, including 0.01 acre of sensitive vegetation communities (Tier I southern maritime chaparral) and would avoid the MHPA (Table 3; Figure 5). Impacts would occur where the proposed bridge meets the existing grade outside the canyon, including the bridge foundations, and work areas around the foundations, and extensions of existing pedestrian pathways to the bridge. The proposed bridge meets

Zone 1 brush management standards and would not require a brush management plan or additional brush managements. The impacts to sensitive vegetation communities total less than 0.10 acre and are therefore considered less than significant and would not require mitigation (City of San Diego 2016). Other impacts to Tier IV habitats and urban/developed are not considered significant.

Table 3 Impacts to Vegetation Communities and Land Cover Types (acres)			
Vegetation Community/	City of San Diego		
Land Cover Types	Tier	Survey Area	Impacts
Southern riparian scrub	NA	0.06	-
Southern maritime chaparral	Ι	0.63	0.01
Diegan coastal sage scrub	II	0.41	-
Disturbed land	IV	0.01	-
Eucalyptus woodland	IV	0.28	0.15
Urban/developed	NA	2.19	0.16
TOTAL		3.58	0.32
NA: These areas have not been assigned City of San Diego Tiers.			

7.2 Direct Impacts to Sensitive Plant Species

No direct impacts to wart-stemmed ceanothus or Nuttall's scrub oak would occur as a result of the project implementation. These species all exist outside of the bridge abutments where vegetation removal will occur.

7.3 Direct Impacts to Sensitive Wildlife Species

General wildlife. The project may result in direct impacts to small mammals and reptiles with low mobility. Many mammal species and most birds will be able to move out of the way during grading. These impacts to general wildlife are considered less than significant and, therefore, would not require mitigation.

7.3.1 MSCP-Covered Wildlife Species

Belding's orange-throated whiptail. Vegetation clearing and grading activity may impact Belding's orange-throated whiptail, if present within the ornamental, disturbed land, or urban/developed areas. As the project is located outside the MHPA, these impacts would be less than significant.

Southern mule deer. Potentially occurring large mammals, such as southern mule deer, will be able to move out of the way during grading. As this species is considered adequately covered, and the project lies outside the MHPA, these impacts would be considered less than significant.

Coastal California gnatcatcher. As noted above, coastal California gnatcatcher has moderate potential to occur in the Diegan coastal sage scrub on-site but is not expected to occur in the southern maritime chaparral or other habitats that would be impacted. Therefore, no direct impacts to coastal California gnatcatcher would occur.

Southern California rufous-crowned sparrow. Southern California rufous-crowned sparrow has potential to occur in the Diegan coastal sage scrub but is not expected to nest in the southern maritime chaparral on site. Therefore, no direct impacts to nesting individuals are anticipated.

7.3.2 Sensitive Non-Covered Wildlife Species

Direct impacts may occur to the San Diegan tiger whiptail and red diamond rattlesnake, if present, from impacts to the native habitats on site from vegetation clearing, grubbing, grading, and construction. As these species are widespread within suitable habitat throughout the City, and these impacts would occur to a relatively small amount of habitat compared to the amount of native habitat in the vicinity, this loss would not impact the regional long-term survival of this species and would therefore not be significant.

7.4 Indirect Impacts to Sensitive Wildlife

Construction noise has potential to cause indirect impacts to sensitive bird species should construction activities occur adjacent to occupied habitat during the general bird breeding season (February 1 to September 15). However, as the project is located 1,400 feet outside the MHPA, these indirect noise impacts would be considered less than significant, and mitigation would not be required.

The lighting included on the top cross beams and handrails of the bridge will include soft LED bulbs and all lighting will be shielded from the vegetation below with intention to keep the lighting focused inward towards the bridge walkway. Although the bridge design will produce some light, it will be a very low level of lighting and not anticipated to affect nesting birds in the canyon. As such, these indirect impacts are considered insignificant and not require mitigation.

As mentioned in Section 1.2, the bridge walkway will consist of planks (separated by only 7/16 inch), which would allow some sunlight to reach vegetation under the bridge throughout the day. The width of the bridge is narrow at 10 feet wide and spans the canyon from north to south. As the sun will be moving from east to west, it is not anticipated that the bridge will create long-term shading during the day on the vegetation below. Therefore, any impact resulting from shading is considered less than significant and does not require mitigation.

Overall, potential indirect impacts from noise, lighting, or shading would be minimal and not expected to reduce these species' local or regional populations.

7.5 Direct Impacts to Open Space Easement

As described in Section 4.4.8, a portion of the limits of work for the pedestrian bridge occur within an open space easement previously recorded as part of the La Jolla Pines Technology Centre in 1992 (Figure 8). This easement was placed over this area to protect steep slopes. Attachment 6 includes an easement exhibit that shows the majority of the encroachment (3,891.57 square feet) is part of a temporary construction impact area that will be revegetated, per the project's landscape plans. The only impermeable area of the project, (the southern bridge abutment), is very small consisting of a 192.4-square-foot area. The pathway areas are dirt with decomposed granite added and total 550.94 square feet. No steep slopes will be impacted as part of this project; therefore, these impacts are considered to be less than significant.

7.6 Jurisdictional Waters/Wetlands

7.6.1 USACE, CDFW, RWQCB, and CCC Jurisdictional Waters/Wetlands

The proposed project would not impact any potential USACE, CDFW, RWQCB, or CCC jurisdictional wetlands or waters (see Figure 6). The edge of the southern work area lies approximately 10 feet west and 20 feet uphill of the drainage. The southern riparian scrub that would be considered a CDFW, RWQCB, and CCC jurisdictional wetland is 11 feet northwest from the southern work area and 15 feet from the bridge abutment and any associated grading. The wetland and non-wetland waters would not be directly impacted and no wetland permits would be required. To prevent indirect impacts during construction, silt fencing and all necessary erosion control measures would be installed within the impact footprint to prevent runoff or sedimentation into the drainage.

7.6.2 City of San Diego Wetlands

The proposed project would not impact any City wetlands (see Figure 6). The edge of the City wetlands is 15 feet northwest and 20 feet below the limits of the southern work area and 26 feet northwest from the bridge abutment and any associated grading (see Figure 7). Indirect impacts would be prevented during construction though application of silt fencing and all necessary erosion control measures installed within the impact footprint to prevent runoff or sedimentation into the drainage.

Wetland Buffer Analysis

As noted above, the City Biology Guidelines require buffers to protect the functions and values of wetlands, and within the coastal zone a 100-foot wetland buffer is required. When a lesser buffer is proposed a request for a deviation from this guideline must be approved by the City and Wildlife Agencies. Factors to be considered in the deviation request include an evaluation of wetland functions and values based on biological, hydrologic, and water quality criteria. These factors are discussed below.




Survey Area

Open Space Easement Recorded By CarrAmerica in 1993

Open Space Easement Recorded by Jolla Pines Technology Center



Limit of Work/Impacts

Bridge Abutment

FIGURE 8 Project Location in Relation to Existing Open Space Easements

RECON M:\JOBS5\9160\common_gis\fig8SB.mxd 09/21/2021 bma Currently, there is a buffer of 30 feet between the City wetlands and the developed parking lot to the west. The wetland buffer extends approximately 140 feet north to the Spectrum 1 development, 92 feet northeast to the Spectrum 2 development, and 212 feet southeast to the Spectrum 5 development. There are no restrictions to the buffer to the east. Additional details on the current conditions and functions of the wetland buffers on-site are presented in Section 4.4.5.5 above.

For this bridge project, features that would encroach on or reduce the 100-foot wetland buffers where such buffers currently exist include areas that would introduce structures or other impermeable surfaces. The bridge abutments are the only permanent impermeable features proposed for this project. All remaining areas within the limits of work, including the crane laydown area, consist of non-invasive landscaping and a decomposed granite footpath. Per the City's Biology Guidelines, non-invasive landscaping is considered a functional wetland buffer. The decomposed granite footpath would be narrow and permeable and is; therefore, not included as a buffer encroachment in this discussion.

Implementation of the proposed project would not affect the current buffer distance to the west or north. To the northeast, the buffer would be reduced to 92 feet, as the northern bridge abutment would lie at the edge of an existing developed portion of the Spectrum 2 development. The southern bridge abutment will occur 26 feet southeast from the wetland. The width of the southern bridge abutment at that location is 12 feet, beyond which the remaining 160 feet would be eucalyptus woodland and southern maritime chaparral. As this southern abutment would occur within 100 feet of the southern riparian scrub, it would encroach on the wetland buffer reducing the distance between the edge of the wetland and the abutment to approximately 26 feet.

Information provided to support the deviation from the 100-foot buffer distance was presented to the City and Wildlife Agencies in a meeting held on September 17, 2021. Both the City and Wildlife Agencies concurred that the current functions and values of the wetland area would be maintained as the vertical buffer of 30 feet from the bridge to the habitat and the horizontal buffer of 26 feet from the southern bridge abutment to the habitat will restrict access to these wetlands. These topographic barriers would prohibit any pedestrians from entering into the mapped wetlands. The following discussion presents the analysis of the anticipated effects of the bridge project on the biological, hydrological, and water quality functions of the wetland buffer to the southeast provided to the City and Wildlife Agencies.

Biological Functions

The southern bridge abutment is approximately 193 square feet in area and would be located 26 feet southeast of the existing wetlands. This abutment would be located at an elevation that is topographically 30 feet above the ground level of the wetlands. It would displace 69 square feet of eucalyptus woodland and 156 square feet of southern maritime chaparral; however, following construction, most of the impacted eucalyptus woodland would be revegetated as part of the landscape plans. The bridge span would cross through the wetland buffer but would be elevated several feet above the vegetation.

As noted above, the impacted southern maritime chaparral lies in a 10-foot-wide strip of vegetation at the edge of a cliff leading down to the canyon and the wetland habitat. Beyond the southern maritime chaparral is a patch of eucalyptus woodland, beyond which is more southern maritime chaparral, extending another 160 feet to Spectrum 5. This impacted southern maritime chaparral and eucalyptus woodland likely provide habitat for several native wildlife species, including Belding's orange-throated whiptail, San Diegan tiger whiptail, red diamond rattlesnake, coastal California gnatcatcher, southern California rufous-crowned sparrow, and southern mule deer. Despite removal of vegetation, installation of the bridge and associated abutment would not greatly alter wildlife use through this segment of the canyon. The bridge is designed for pedestrians and bicycles and would introduce minimal lighting and no vehicle noise to disrupt native wildlife use of the area. Wildlife would be expected to cross underneath the bridge and around the abutments relatively unimpeded. Trash would be controlled by the maintenance staff associated with the Spectrum 2 and 5 buildings, and receptacles would be provided and regularly emptied.

Thus, while the bridge abutment would be within 100 feet of the existing wetland it is not expected to substantially alter the overall nature of the wetland habitat within the canyon and would not substantially reduce wildlife use of the area.

Hydrologic Functions

As noted in Section 4.4.5.5, the water source supporting the wetlands on-site is a storm drain releasing urban runoff and landscaping irrigation water from the parking lot to the west. Based on the topography of the site, water from the project site is expected to flow into the canyon to the east and; therefore, downstream of the wetlands. Erosion and sediment control measures such as silt fencing, straw wattles, and other erosion control measures would be installed within the impact footprint to prevent runoff or sedimentation into the drainage system during construction. Thus, the proposed reduction of the wetland buffer is not expected to substantially alter drainage, erosion, sedimentation, or salinity within the wetland habitat or the associated drainage system within the canyon.

Water Quality Functions

The only permanent impermeable surfaces included in the proposed project are within the bridge abutment footprints, of which total approximately 386 square feet would occur within the 100-foot wetland buffer. The rest of the project footprint would consist of areas that would retain permeable surfaces, such as landscaping. Thus, the proposed wetland buffer reduction is not anticipated to alter water storage, groundwater recharge, or water purification functions within the project site or canyon.

7.7 Wildlife Corridors

The canyon within the project site likely functions for local wildlife movement but lacks regional value as a wildlife corridor. All proposed impacts would occur outside the canyon itself, which would minimize impacts to wildlife movement. In addition, the project avoids the vast majority of the native vegetation in the canyon, with the small areas of impact occurring along the edges, adjacent to development or exotic vegetation. The project is not anticipated to substantially affect overall wildlife movement and would not affect corridor function of the canyon. Thus, impacts to wildlife corridors would be less than significant.

7.8 Cumulative Impacts

The proposed project would not result in significant impacts to any sensitive vegetation communities or species. Therefore, it would not contribute to any cumulatively significant impacts to these resources.

8.0 Mitigation and Monitoring Measures

As discussed in Section 7, project impacts to sensitive vegetation communities and plant species would be less than significant and would not require mitigation. Both direct and indirect impacts to Belding's orange-throated whiptail, southern mule deer, coastal California gnatcatcher, and southern California rufous-crowned sparrow would be less than significant and would not require mitigation. The project would also not impact any wetlands or non-wetland/streambed waters, so no mitigation would be required.

9.0 References Cited

Atwood, J. L., and D. R. Bontrager

2001 California Gnatcatcher (*Polioptila californica*), version 2.0. In The Birds of North America, (A. F. Poole and F. B. Gill, Editors). Cornell Lab of Ornithology, Ithaca, NY. https://doi.org/10.2173/bna.574.

Baker, R. J., Lisa C. Bradley, Robert D. Bradley, Jerry W. Dragoo, Mark D. Engstrom, Robert S. Hoffman, Cheri A. Jones, Fiona Reid, Dale W. Rice, and Clyde Jones

2003 Revised Checklist of North American Mammals North of Mexico. Occasional Papers, Museum of Texas Tech University No. 229. December.

Beier, P. and S. Loe

1992 A Checklist for Evaluating Impacts to Wildlife Movement Corridors. Wildlife Society Bulletin. 20:434-440.

Bostic, D. L.

1966 Food and Feeding Behavior of the Lizard, *Cnemidophorus hyperythrus beldingi*. Southwest Naturalist 11: 275-289.

Brenzel, K. N.

2001 Sunset Western Garden Book. Sunset Publishing. Menlo Park, California.

California Department of Fish and Wildlife (CDFW)

- 1991 California Fish and Game Code, Section 3503.
- 2019 Special Animals List. Periodic publication. 67 pp. August.
- 2020a Natural Diversity Database. Nongame-Heritage Program, California Department of Fish and Wildlife, Sacramento. RareFind Version 5.2.14. Accessed May.
- 2020b Special Vascular Plants, Bryophytes, and Lichens List. Quarterly publication. 140 pp. January.
- California Native Plant Society (CNPS)
 - 2020 Inventory of Rare and Endangered Plants (online edition, v8-2). California Native Plant Society, Sacramento, CA. Accessed from http://www.rareplants.cnps.org.
- California Invasive Plant Council (Cal-IPC)
 - 2020 California Invasive Plant Inventory Database. http://www.cal-ipc.org/paf/.

Chesser, R. T., K. J. Burns, C. Cicero, J. L. Dunn, A. W. Kratter, I. J. Lovette, P. C. Rasmussen, J. V. Remsen, Jr., D. F. Stotz, B. M. Winger, and K. Winker

- 2019 Check-list of North American Birds (online). American Ornithological Society. June 24. http://checklist.aou.org/taxa.
- Collins, Paul W.
 - 1999 Rufous-crowned Sparrow (Aimophila ruficeps). The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology. Birds of North America Online Database: http://bna.birds.cornell.edu/bna/species/472.

Crother, B. I., Rondald M. Bonett, Jeff Boundy, Frank T. Burbrink, Kevin de Queiroz, Darrel R. Frost, Richard Highton, John B. Iverson, Elizabeth L Jockusch, Fred Kraus, Kenneth L. Krysko, Adam D. Leaché, Emilly Moriarty Lemmon, Roy W. McDiarmid, Joseph R. Mendelson III, Peter A. Meylan, Tod W. Reeder, Sara Ruane, Michael E. Seidel

2017 Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding. Eighth Edition. Society for the Study of Amphibians and Reptiles Herpetological Circular 43.

Holland, R. F.

1986 Preliminary Descriptions of the Terrestrial Natural Communities of California. Nongame-Heritage Program, California Department of Fish and Game. October.

Jennings, M. R., and M. P. Hayes

1994 Amphibian and Reptile Species of Special Concern in California. Final report submitted to the California Department of Fish and Game, Inland Fisheries Division, Rancho Cordova, CA. Contract number 8023. Jepson Flora Project (eds.)

2016 Jepson eFlora, http://ucjeps.berkeley.edu/IJM.htm.

Lemm, J. M.

2006 Field guide to amphibians and reptiles of the San Diego Region. University of California Press.

Lichvar, R. W.

2016 The National Wetland Plant List. Prepared for U.S. Army Corps of Engineers, Department of the Army. May 1.

Oberbauer, Thomas, Meghan Kelly, and Jeremy Buegge

2008 Draft Vegetation Communities of San Diego County. Based on "Preliminary Descriptions of the Terrestrial Natural Communities of California," Robert F. Holland, Ph.D., October 1986. March.

Rebman, J. P., and M. G. Simpson

2014 Checklist of the Vascular Plants of San Diego County, 5th edition. San Diego Natural History Museum.

RECON Environmental Inc.

- 2016 Biological Resource Report for the Spectrum 3 and 4, 3115 and 3215 Merryfield Row Project, San Diego, California. June 15.
- 2018 Results of the Biological Resources Constraints for the Spectrum 2 and 5 Bridge Project (RECON Number 9160).
- 2021a Jurisdictional Waters Delineation Report for the Spectrum Pedestrian Bridge Project, San Diego, California. August 9.
- 2021b Results of a Cultural Resources Survey for the Spectrum Pedestrian Bridge Project, San Diego, California. January 22.

Reiser, Craig H.

2001 Rare Plants of San Diego County. July. Aquafir Press.

San Diego Association of Governments (SANDAG)

1995 Soil Series GIS Data. Data digitized from USDA-1973. Soil Survey, San Diego area. Obtained from http://www.sandag.org/resources/maps_and_gis/ gis_downloads/senlu.asp.

San Diego, City of

- 1989 Environmental Impact Report; La Jolla Pines Technology Center. EQC No. 88-0244. September 18.
- 1992a La Jolla Pines Technology Centre Subdivision Map No. 12960. Recorder File No. 92-509036, TM 88-0244. August 12.

- 1992b Final Environmental Impact Report for the La Jolla Spectrum Planned Industrial Development; DEP No. 89-0269; SCH No. 91071013.
- 1997 Multiple Species Conservation Plan. City of San Diego MSCP Subarea Plan. March.
- 2016 Significance Determination Guidelines Under the California Environmental Quality Act. Planning and Development Review, Land Development Review Division, Environmental Analysis Section. July.
- 2017 Final City of San Diego Vernal Pool Habitat Conservation Plan. October.
- 2018 San Diego Municipal Code. Land Development Manual. Biology Guidelines. Adopted September 28, 1999. Amended February.

San Diego, County of

- 2010 Guidelines for Determining Significance and Report Format and Content Requirements. Biological Resources. Land Use and Environmental Group. Department of Planning and Land Use. Department of Public Works. Fourth Revision. September 15.
- 2020 SanBIOS points. SanGIS Data Warehouse. San Diego Geographic Information Source – JPA. Modified from the Biological Observation Database. Department of Planning and Land Use. Accessed at http://www.sangis.org/download/index.html. Accessed April.
- San Diego Natural History Museum
 - 2002 Butterflies of San Diego County, prepared by Michael Klein. Revised September 2002. http://www.sdnhm.org/science/entomology/projects/checklist-of-butterfliesof-san-diego-county/.

Stebbins, R. C.

- 2003 A Field Guide to Western Reptiles and Amphibians. 3rd ed., revised. Houghton Mifflin, Boston.
- Tremor, S., D. Stokes, W. Spencer, J. Diffendorfer, H. Thomas, S. Chivers, and P. Unitt
 - 2017 San Diego Mammal Bird Atlas. Proceedings of the San Diego Society of Natural History, No. 46. San Diego Natural History Museum.
- U.S. Army Corps of Engineers (USACE)
 - 1987 Corps of Engineers Wetlands Delineation Manual. Wetlands Research Program, Technical Report Y-87-1. Department of the Army, Washington, DC.
 - 2008a A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. August.

- 2008b Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. Prepared by U.S. Army Engineer Research and Development Center. September.
- U.S. Department of Agriculture (USDA)
 - 1973 Soil Survey, San Diego Area, California. Soil Conservation Service and Forest Service. Roy H. Bowman, ed. San Diego. December.
 - 2013 Plants Database. Accessed from http://plants.usda.gov.
 - 2020a Natural Resources Conservation Service (NRCS), Soil Survey Staff. Official Soil Series Descriptions [Online]. USDA-NRCS, Lincoln, NE. Available at https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. Accessed March.
 - 2020b Hydric Soils List. Natural Resources Conservation Service. Available at https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd1316620.html. Accessed December.
- U.S. Fish and Wildlife Service (USFWS)
 - 2010 Coastal California gnatcatcher (*Polioptila californica californica*) 5-year Review: Summary and Evaluation U.S. Fish and Wildlife Service. September.
 - 2020 All Species Occurrences GIS Database. Carlsbad Fish and Wildlife Office. Accessed April.
- U.S. Geological Survey (USGS) 1994 Del Mar Quadrangle 7.5-Minute Topographic Map.

Unitt, P. A.

2004 San Diego County Bird Atlas. Proceedings of the San Diego Society of Natural History, No. 39. San Diego Natural History Museum.

University of California

2020 The Jepson Online Interchange: California Floristics. Berkeley: The Regents of the University of California. Accessed from http://ucjeps.berkeley.edu/interchange.html.

Plant Species Observed

	Attachment 1 Plant Species Observed		
Scientific Name	Common Name	Habitat	Origin
	GYMNOSPERMS		
PINACEAE	PINE FAMILY	DEV	NI/(T)
Pinus torreyana ssp. torreyana	Torrey pine	DEV	N/(I)
	GIOSPERMS: MONOCOTS		
CYPERACEAE	SEDGE FAMILY	DEV	Ι
Cyperus sp.	tall flatsedge bulrush	DEV	I
Schoenoplectus sp.		DEV	1
POACEAE (GRAMINEAE)	GRASS FAMILY	DI	Ŧ
Bromus diandrus	ripgut grass	DL DCCC ODV	I
Bromus hordeaceus	soft chess	DCSS, ORN	I
Bromus madritensis ssp. rubens	red brome	DCSS, DL	I
Cortaderia selloana	pampas grass	DCSS, DEV	I
Cynodon dactylon	Bermuda grass	DEV	I
Festuca [=Vulpia] myuros	rattail sixweeks grass	SMC DOGG GMG	I
Muhlenbergia rigens	deer grass	DCSS, SMC	N
Polypogon monspeliensis	annual beard grass	SMC, DEV	I
Stipa sp.	needle grass	DCSS	N
THEMIDACEAE	BRODIAEA FAMILY		
Dichelostemma capitatum	blue dicks	DCSS	N
A	ANGIOSPERMS: DICOTS		
AIZOACEAE	FIG-MARIGOLD FAMILY		
Carpobrotus edulis	freeway iceplant	DCSS, DEV	Ι
ANACARDIACEAE	SUMAC OR CASHEW FAMILY		
Malosma laurina	laurel sumac	DCSS	N
Rhus integrifolia	lemonade berry	DCSS, SMC, EW	N
Schinus terebinthifolius	Brazilian pepper tree	DEV	Ι
APOCYNACEAE	DOGBANE FAMILY		
Vinca major	greater periwinkle	DEV	Ι
			1
ASTERACEAE	SUNFLOWER FAMILY	Daga	N
Artemisia californica Less.	California sagebrush	DCSS DCSC DEV	N
Baccharis pilularis	coyote brush	DCSS, DEV	т
Centaurea melitensis	tocalote	DCSS, DEV	I
Chaenactis glabriuscula Encelia californica	yellow pincushion California encelia	DCSS	N N
Erigeron bonariensis	flax-leaved horseweed	DEV	I
0		DEV DCSS	N
Eriophyllum confertiflorum var. confertiflorum	long-stem golden-yarrow	DCSS	IN
Hedypnois cretica	Crete weed	DCSS	Ι
Helianthus gracilentus	slender sunflower	DEV	N
Isocoma menziesii	coastal goldenbush	DCSS	N
Lasthenia gracilis	common goldfields	DCSS	N
Pseudognaphalium bioletti	bicolor cudweed	DCSS	N
Pseudognaphalium californicum	California everlasting	DCSS	N
Pseudognaphalium luteoalbum	everlasting cudweed	DCSS, SMC	I
Sonchus asper ssp. asper	prickly sow thistle	SMAC, DEV	I

	Attachment 1		
	Plant Species Observed		
Scientific Name	Common Name	Habitat	Origin
Sonchus oleraceus	common sow thistle	DEV	
Stephanomeria sp.	wreath-plant	DCSS	N
BORAGINACEAE	BORAGE FAMILY		
<i>Cryptantha</i> sp.	cryptantha	DCSS	N
BRASSICACEAE (CRUCIFERAE)	MUSTARD FAMILY		
Lepidium nitidum	shining peppergrass	DCSS	N
CACTACEAE	CACTUS FAMILY		
Opuntia ficus-indica	mission prickly-pear	DCSS	Ι
Opuntia littoralis	coast prickly-pear	DCSS	N
CHENOPODIACEAE	GOOSEFOOT FAMILY		
Atriplex canescens	four-wing saltbush	DCSS	Ν
CRASSULACEAE	STONECROP FAMILY		
Dudleya lanceolata	lance-leaved dudleya	DCSS	N
CUCURBITACEAE	GOURD FAMILY		
Marah macrocarpa	wild cucumber	DCSS	N
ERICACEAE	HEATH FAMILY		
Xylococcus bicolor	mission manzanita	DCSS, SMC	N
FABACEAE (LEGUMINOSAE)	LEGUME FAMILY		
Acacia cyclops	western coastal wattle	DCSS, DEV	Ι
Acacia redolens	vanilla-scented wattle	DEV, EW	Ι
Acmispon glaber	deerweed	DCSS	N
Lupinus bicolor	miniature lupine	DCSS	N
Medicago polymorpha	California burclover	DEV	Ι
Melilotus indicus	sourclover	DCSS	Ι
FAGACEAE	OAK FAMILY		
Quercus dumosa	Nuttall's scrub oak	SMC	N
LAMIACEAE	MINT FAMILY		
Salvia mellifera	black sage	DCSS, SMC	N
Montiaceae	Montia Family		
Claytonia perfoliata	miner's lettuce	DCSS, SMC	N
Myricaceae	WAX MYRTLE FAMILY		
<i>Eucalyptus</i> sp.	gum tree	EW	Ι
Eucalyptus sideroxylon	red iron bark	EW	I
Myrsinaceae	Myrsine Family		
Lysimachia [=Anagallis] arvensis	scarlet pimpernel	SMC, DEV	Ι
PHRYMACEAE [=SCROPHULARIACEAE]	HOPSEED FAMILY		
Diplacus [=Mimulus] aurantiacus	bush monkey-flower	DCSS, SMC	N
POLYGONACEAE	BUCKWHEAT FAMILY		
Eriogonum fasciculatum	California buckwheat	DCSS	N
RHAMNACEAE	BUCKTHORN FAMILY	- 10 10	
Ceanothus tomentosus	Ramona lilac	SMC	N
Ceanothus verrucosus	wart-stemmed ceanothus	SMC	N

Attachment 1 Plant Species Observed										
Scientific Name	Common Name	Habitat	Origin							
ROSACEAE	Rose Family									
Adenostoma fasciculatum	chamise, greasewood	DCSS, SMC, EW	Ν							
Heteromeles arbutifolia	toyon	DCSS, SMC	N							
SALICACEAE	WILLOW FAMILY									
Salix lasiolepis	arroyo willow	SRS	Ν							
SOLANACEAE	NIGHTSHADE FAMILY									
Solanum parishii	Parish's nightshade	DCSS	N							
Solanum xanti	chaparral nightshade	DEV	Ν							
HABITATS SRS = southern riparian scrub SMC = southern maritime chaparral DCSS = Diegan coastal sage scrub DL = disturbed land EW = eucalyptus woodland DEV = urban/developed land										
ORIGIN										
 N = Native to locality I = Introduced species from outside locality (I) = Introduced species to the ecoregion in which the survey occurred; however, native to other 										
ecoregions within San Diego Cou										

Wildlife Species Observed

	Attachment 2		
	Wildlife Species Observed	Oscial	D. Jacob
Scientific Name	Common Name	Occupied Habitat	Evidence of Occurrence
REPTILES			
PHRYNOSOMATIDAE	SPINY LIZARDS		
Uta stansburiana	common side-blotched lizard	DCSS	0
BIRDS			
ACCIPITRIDAE	HAWKS, KITES, & EAGLES		
Buteo jamaicensis	red-tailed hawk	SMC	0
COLUMBIDAE	PIGEONS & DOVES	21120	
Zenaida macroura marginella	mourning dove	DEV	V
_			•
TROCHILIDAE	HUMMINGBIRDS Anna's hummingbird	DCSS, SMC	0, V
Calypte anna			0, v
TYRANNIDAE	TYRANT FLYCATCHERS	DDV	
Sayornis nigricans semiatra	black phoebe	DEV	0, V
CORVIDAE	CROWS, JAYS, & MAGPIES		0.11
Aphelocoma californica	California scrub-jay	DCSS, SMC	0, V
Corvus brachyrhynchos hesperis	American crow	DEV	0, V
Corvus corax clarionensis	common raven	OH	0
TROGLODYTIDAE	WRENS	017 - 01	
Thryomanes bewickii	Bewick's wren	SMC	V
SYLVIIDAE	BABBLERS		
Chamaea fasciata henshawi	wrentit	DCSS, SMC	V
MIMIDAE	MOCKINGBIRDS & THRASHERS		
Mimus polyglottos polyglottos	northern mockingbird	SMC	0, V
STURNIDAE	STARLINGS & MYNAS		
Sturnus vulgaris	European starling (I)	DEV	V
PASSERELLIDAE	NEW WORLD PASSERINES		
Melospiza melodia	song sparrow	SMC	V
Pipilo maculatus	spotted towhee	DCSS,	0, V
FRINGILLIDAE	FINCHES		
Haemorhous mexicanus frontalis	house finch	SMC	V
MAMMALS	1	I	
LEPORIDAE	RABBITS & HARES		
Sylvilagus audubonii	desert cottontail	DCSS	S
SCIURIDAE	SQUIRRELS & CHIPMUNKS		
Otopermophilus beecheyi	California ground squirrel	SMC	В
(I) = Introduced species		OF OCCURREN	ICE
HABITATS		rrow served	
DCSS = Diegan coastal sage scrub	S = Sca		
DEV = Urban/developed	$V - V_0$	calization	
SMC = Southern maritime chaparral OH = Flying overhead			

Sensitive Plant Species Observed or with the Potential to Occur

Attachment 3 Sensitive Plant Species Observed or with the Potential for Occurrence											
Species' <i>Scientific Name</i> Common Name	State/Federal Status	CNPS Rank	City of San Diego	Habitat/ Preference/Requirements/ Blooming Period	Observed?	Basis for Determination of Occurrence Potential					
LYCOPODS											
SELAGINELLACEAE SPIKE-N	Ioss Family										
Selaginella cinerascens ashy spike-moss	_/_	4.1	_	Perennial rhizomatous herb; chaparral, coastal scrub; elevation 65–2,100 feet.	No	This species was not observed on-site, but was detected during previous RECON surveys in the vicinity. The Diegan coastal sage scrub and maritime chaparral are suitable to support this species. Additionally, this species has been known to occur within one mile of the survey area (CDFW 2020b).					
			C	YMNOSPERMS							
PINACEAE PINE FA	MILY										
Pinus torreyana ssp. torreyana Torrey pine (native pop.)	_/_	1B.2	MSCP	Evergreen tree; closed-cone coniferous forest, chaparral; sandstone; elevation 250–525 feet. San Diego County endemic. There are approximately 7,000 native trees, most in Torrey Pines State Reserve, others on private property. This species is widely planted as an ornamental in the region.	Yes	Several individuals were observed in landscaped areas associated with the existing developments. As these trees were originally from planted individuals, they are not considered sensitive.					

Attachment 3 Sensitive Plant Species Observed or with the Potential for Occurrence Species' Scientific Name State/Federal City of Habitat/ Preference/Requirements/ Observed or with the Potential for Occurrence											
Species' <i>Scientific Name</i> Common Name	State/Federal	Rank	City of San Diego	Habitat/ Preference/Requirements/ Blooming Period	Observed?	Occurrence Potential					
			ANG	IOSPERMS: DICOTS							
CHENOPODIACEAE GOOSE	FOOT FAMILY										
Aphanisma blitoides aphanisma	_/_	1B.2	NE, MSCP	Annual herb; coastal bluff scrub, coastal sage scrub; sandy soils; blooms March–June; elevation less than 1,000 feet.	No	This species was not observed within the survey area and is not expected to occur due to the lack of sandy soils. Aphanisma has been known to occur within a one-mile buffer of the survey area (CDFW 2020b).					
APIACEAE CARRO	OT FAMILY										
Eryngium aristulatum var. parishii San Diego button-celery	CE/FE	1B.1	VPS, MSCP	Biennial/perennial herb; vernal pools, mesic areas of coastal sage scrub and grasslands, blooms April–June; elevation less than 2,000 feet. Known from San Diego and Riverside counties. Additional populations occur in Baja California, Mexico.	No	This species was not observed within the survey area and is not expected to occur due to the lack of vernal pool habitat or mesic areas of coastal sage scrub/ grasslands.					

		Obse		Attachment 3 sitive Plant Species th the Potential for Occurrence		
Species' <i>Scientific Name</i> Common Name	State/Federal Status	CNPS Rank	City of San Diego	Habitat/ Preference/Requirements/ Blooming Period	Observed?	Basis for Determination of Occurrence Potential
ASTERACEAE SUNFL	OWER FAMILY			· · · · · ·		
<i>Ambrosia pumila</i> San Diego ambrosia	-/FE	1B.1	NE, MSCP	Perennial herb (rhizomatous); found primarily on the upper terraces of rivers and drainages, particularly in association with grasslands , open coastal sage scrub, vernal pools, amnd disturbed areas; blooms May– September; elevation less than 1,400 feet. Many occurrences extirpated in San Diego County.	No	This species has low potential to occur. Habitat in the survey area is only marginally suitable, due to the high density of vegetation and lack of openings or stream terraces. The nearest known population is in Mission Trails Regional Park, approximately 13 miles east of the project site (USFWS 2010).
Baccharis vanessae Encinitas baccharis [=Encinitas coyote brush]	CE/FT	1B.1	NE, MSCP	Perennial deciduous shrub; chaparral; maritime; sandstone; blooms August– November; elevation less than 2,500 feet. San Diego County endemic. Known from fewer than 20 occurrences. Extirpated from Encinitas area.	No	This species is not expected to occur as the project site is out of its known range.
Bahiopsis laciniata San Diego viguiera]	_/_	4.3	_	Perennial shrub; chaparral, coastal sage scrub; blooms February–June; elevation less than 2,500 feet.	No	This species has been observed throughout the Diegan coastal sage scrub east of the survey area, but not on-site. It is a conspicuous shrub and would have been detected if present.

Attachment 3 Sensitive Plant Species												
Observed or with the Potential for Occurrence												
Species' <i>Scientific Name</i> Common Name	State/Federal Status	CNPS Rank	City of San Diego	Habitat/ Preference/Requirements/ Blooming Period	Observed?	Basis for Determination of Occurrence Potential						
Chaenactis glabriuscula var. orcuttiana Orcutt's pincushion	_/_	1B.1	_	Annual herb; coastal bluff scrub, sandy, coastal dunes; blooms January–August; elevation less than 350 feet.	No	This species is not expected to occur due to the lack of sandy soils. There are no records of this species within one mile of the survey area (CDFW 2020b).						
Corethrogyne filaginifolia var. incana San Diego sand aster	_/_	1B.1	_	Perennial herb; chaparral, coastal bluff scrub, coastal sage scrub; blooms June– September; elevation less than 400 feet. Known in California from fewer than 10 occurrences all of which are in San Diego County. Additional populations in Baja California, Mexico.	No	This species has moderate potential to occur due to the presence of coastal sage scrub habitat. The nearest record of this species is a 1992 observation on a now- developed site approximately 0.6 mile south of the survey area (CDFW 2020b).						
Corethrogyne filaginifolia var. linifolia Del Mar Mesa sand aster	_/_	1B.1	MSCP	Perennial herb; coastal bluff scrub, openings in southern maritime chaparral and coastal sage scrub; sandy soil; blooms May–September; elevation less than 500 feet. San Diego County endemic.	No	This species has low potential to occur due to the lack of sandy soils and low number of openings in the coastal sage scrub and southern maritime chaparral. The nearest record of this species is a 1992 observation within chamise chaparral just east of Torrey Pines Road 0.9 mile north of the project site (CDFW 2020b).						
Deinandra conjugens Otay tarplant	CE/FT	1B.1	NE, MSCP	Annual herb; clayey soils of coastal scrub openings, valley and foothill grassland; blooms April–June, elevation less than 1,000 feet.	No	This species is not expected to occur as the project site is out of its known range.						

Attachment 3 Sensitive Plant Species Observed or with the Potential for Occurrence											
Species' <i>Scientific Name</i> Common Name	State/Federal Status	CNPS Rank	City of San Diego	Habitat/ Preference/Requirements/ Blooming Period	Observed?	Basis for Determination of Occurrence Potential					
<i>Heterotheca sessiliflora</i> ssp. <i>sessiliflora</i> beach goldenaster	_/_	1B.1	_	Perennial herb; chaparral (coastal), coastal dunes, coastal scrub; blooms March–December; elevation less than 4,000 feet. Known in California from 12 occurrences presumed to be extant in San Diego County. Additional populations occur in Baja California, Mexico.	No	Although there is maritime chaparral habitat present, the survey area lacks sandy soils; therefore the potential for occurrence is low. The nearest record of this species is a 1950 collection that lacks precise locational data (CDFW 2020b).					
Isocoma menziesii var. decumbens decumbent goldenbush	_/_	1B.2	_	Perennial shrub; chaparral, coastal sage scrub; sandy soils, often in disturbed areas; blooms April– November; elevation less than 500 feet.	No	This perennial species was not observed and would have been apparent at the time of the survey, if present. Therefore, it is not expected to occur within the survey area. The nearest record of this species is from the coastal bluffs approximately 1.1 mile southwest of the project site (CDFW 2020b).					
<i>Iva hayesiana</i> San Diego marsh-elder	_/_	2B.2	_	Perennial herb; marshes and swamps, playas, riparian areas; blooms April– September; elevation below 1,700 feet.	No	This is a conspicuous perennial species and would have been detected if present.					

Attachment 3 Sensitive Plant Species Observed or with the Potential for Occurrence											
Species' <i>Scientific Name</i> Common Name	State/Federal Status	CNPS Rank	City of San Diego	Habitat/ Preference/Requirements/ Blooming Period	Observed?	Basis for Determination of Occurrence Potential					
Leptosyne [=Coreopsis] maritima sea-dahlia	_/_	2B.2	_	Perennial herb; coastal bluff scrub, coastal sage scrub; blooms March–May; elevation less than 500 feet.	No	This species has moderate potential to occur in the coastal sage scrub on-site. In the vicinity of the project, all known observations are found in openings along the coastal bluffs, with the nearest record occurring 0.9 mile southwest of the survey area (CDFW 2020b).					
BORAGINACEAE BORAG	E FAMILY										
Phacelia stellaris Brand's star phacelia	_/_	1B.1	_	Annual herb; coastal scrub coastal dunes; blooms March–June; elevation less than 1,300 feet. Known from approximately 10 occurrences in San Diego, Riverside, San Bernardino, Los Angeles (presumed extirpated), and Orange counties. Additional populations occur in Baja California, Mexico.	No	This species is not expected to occur within the survey area due to the lack of coastal dune habitat and sandy soils. The only record of this species in the project vicinity is an undated reference in the CNDDB, which notes this species occurs at Torrey Pines State Natural Reserve (CDFW 2020b).					
	S FAMILY	1		T							
Bergerocactus emoryi golden-spined cereus	_/_	2B.2	_	Perennial stem succulent; closed-cone coniferous forest, chaparral, coastal sage scrub; sandy soils; blooms May– June; elevation less than 1,300 feet.	No	This perennial species is not expected to occur. It is a conspicuous perennial and would have been apparent at the time of the survey.					

			Sens	Attachment 3 sitive Plant Species							
Observed or with the Potential for Occurrence											
Species' <i>Scientific Name</i> Common Name	State/Federal Status	CNPS Rank	City of San Diego	Habitat/ Preference/Requirements/ Blooming Period	Observed?	Basis for Determination of Occurrence Potential					
Cylindropuntia californica var. californica snake cholla	_/_	1B.1	NE, MSCP	Perennial stem succulent; chaparral, coastal sage scrub; blooms April–May; elevation 100–500 feet.	No	This perennial species is not expected to occur. It is a conspicuous perennial and would have been apparent at the time of the survey.					
Ferocactus viridescens San Diego barrel cactus		2B.1	MSCP	Perennial stem succulent; chaparral, coastal sage scrub, valley and foothill grasslands, vernal pools; blooms May– June; elevation less than 1,500 feet.	No	This species has been observed in the coastal sage scrub several hundred feet to the east of the survey area, but would have been detected if present on-site.					
CRASSULACEAE STONEC	ROP FAMILY										
Dudleya brevifolia short-leaved dudleya	CE/-	1B.1	NE, MSCP	Perennial herb; southern maritime chaparral, coastal sage scrub on Torrey sandstone; blooms in April; elevation less than 1,000 feet. San Diego County endemic. Known from fewer than five occurrences in the Del Mar and La Jolla areas.	No	This species has moderate potential to occur due to the presence of southern maritime chaparral. There are no database records of this species within two miles of the project site (CDFW 2020b).					
<i>Dudleya variegata</i> variegated dudleya	_/_	1B.2	NE, MSCP	Perennial herb; openings in chaparral, coastal sage scrub, grasslands, vernal pools; blooms May–June; elevation less than 1,900 feet.	No	This species has low potential to occur. The southern maritime chaparral and coastal sage are marginally suitable as there are few openings. The only record of this species within two miles is a 1922 collection "south of Torrey Pines," which has not been supported by more recent surveys (CDFW 2020b).					

Attachment 3 Sensitive Plant Species Observed or with the Potential for Occurrence										
Species' <i>Scientific Name</i> Common Name	State/Federal Status	CNPS Rank	City of San Diego	Habitat/ Preference/Requirements/ Blooming Period	Observed?	Basis for Determination of Occurrence Potential				
Dudleya viscida sticky dudleya	_/_	1B.2	MSCP	Coastal sage scrub, mesic, north-facing slopes in shade; gabbroic rock; blooms May–June; elevation less than 1,800 feet. California endemic. Known from San Diego, Riverside, and Orange counties.	No	This species has low potential to occur. The southern maritime chaparral and coastal sage are marginally suitable but lack gabbro soils. The only record of this species within two miles is a 1987 collection that lacks clear locational data (CDFW 2020b).				
ERICACEAE HEATH	FAMILY									
Arctostaphylos glandulosa ssp. crassifolia Del Mar manzanita	–/FE	1B.1	MSCP	Perennial evergreen shrub; southern maritime chaparral; sandy soil; blooms December–April; elevation less than 1,200 feet.	No	This species has moderate potential to occur due to the presence of suitable maritime chaparral. This species is known from records in remnant habitat areas in the vicinity of Science Park (CDFW 2020b).				

		Ohr		Attachment 3 sitive Plant Species th the Potential for Occurrence		
Species' <i>Scientific Nan</i> Common Name	ne State/Federal Status	CNPS Rank	City of San Diego	Habitat/ Preference/Requirements/ Blooming Period	Observed?	Basis for Determination of Occurrence Potential
EUPHORBIACEAE SP	URGE FAMILY					
Euphorbia misera cliff spurge	_/_	2B.2	_	Shrub; coastal sage scrub, maritime succulent scrub, coastal bluff scrub; blooms December–August; elevation less than 2,000 feet.	No	This species is has low potential to occur within the survey area. Although there is coastal sage scrub present, suitable cliff habitat does not occur. This is a shrub species that would have been apparent in the coastal sage scrub habitat if present. The nearest record of this specie is from the costal cliffs one mile northwest of the project site (CDFW 2020b).
FABACEAE LE	GUME FAMILY					
Astragalus tener var. titi coastal dunes milkvetch	CE/FE	1B.1	NE, MSCP	Annual herb; coastal bluff scrub, coastal dunes, sandy soils, mesic coastal prairie; blooms March–May; elevation less than 200 feet. California endemic. Known from fewer than 10 occurrences in San Diego (presumed extirpated), Los Angeles (presumed extirpated), and Monterey counties.	No	This species is not expected to occur due to the lack of coastal bluff scrub, coastal dunes habitats, mesic areas of coastal prairie, and sandy soils.
FAGACEAEOA	AK FAMILY					
<i>Quercus dumosa</i> Nuttall's scrub oak	_/_	1B.1	_	Perennial evergreen shrub; closed-cone coniferous forest, coastal chaparral, coastal sage scrub; sandy and clay loam soils; blooms February–March; elevation less than 1,300 feet.	Yes	One individual was found in the eastern portion of the survey area. It also occurs as a co-dominant in the maritime chaparral to the east of the survey area.

Attachment 3 Sensitive Plant Species Observed or with the Potential for Occurrence									
Species' <i>Scientific Name</i> Common Name	State/Federal Status	CNPS Rank	City of San Diego	Habitat/ Preference/Requirements/ Blooming Period	Observed?	Basis for Determination of Occurrence Potential			
LAMIACEAE MINT F	'AMILY								
Acanthomintha ilicifolia San Diego thornmint	CE/FT	1B.1	NE, MSCP	Annual herb; chaparral, coastal sage scrub, and grasslands; friable or broken clay soils; blooms April–June; elevation less than 3,200 feet.	No	This species has low potential to occur within the survey area due to the lack of friable or broken clay soils onsite. There are no records of this species within two miles of the project site.			
Pogogyne abramsii San Diego mesa mint	CE/FE	1B.1	VPS, MSCP	Annual herb; vernal pools; blooms April–July; elevation 300–700 feet. San Diego County endemic.	No	This species is not expected to occur within the survey area due to a lack of vernal pools. There are no records of this species within two miles of the project site.			
Pogogyne nudiuscula Otay mesa mint	CE/FE	1B.1	VPS, MSCP	Annual herb; vernal pools; blooms May–July; elevation 300–820 feet. In California, known from approximately 10 occurrences in Otay Mesa in San Diego County. Additional populations occur in Baja California, Mexico.	No	This species was not observed is not expected to occur within the survey area due to a lack of vernal pools. There are no records of this species within two miles of the project site.			
POLEMONIACEAE PHLOX	FAMILY								
Navarretia fossalis spreading navarretia [=prostrate navarretia]	-/FT	1B.1	VPS, MSCP	Annual herb; vernal pools, marshes and swamps, chenopod scrub; blooms April– June; elevation 100–4,300 feet.	No	This species was not observed is not expected to occur within the survey area due to a lack of vernal pools. There are no records of this species within two miles of the project site.			

		Obse		Attachment 3 sitive Plant Species th the Potential for Occurrence		
Species' <i>Scientific Name</i> Common Name	State/Federal Status	CNPS Rank	City of San Diego	Habitat/ Preference/Requirements/ Blooming Period	Observed?	Basis for Determination of Occurrence Potential
RHAMNACEAE BUCK	THORN FAMILY					
Adolphia californica California adolphia	_/_	2B.1	_	Perennial deciduous shrub; Diegan coastal sage scrub and chaparral; clay soils; blooms December–May; elevation 100–2,500 feet.	No	This species has low potential to occur. Despite the presence of suitable coastal sage scrub, this is a perennial shrub species that would have been apparent if present. The nearest records of this specie date to 1936 or earlier, with no more recent supporting observations (CDFW 2020b).
Ceanothus verrucosus wart-stemmed ceanothus	_/_	2B.2	MSCP	Perennial evergreen shrub; chaparral; blooms December–April; elevation less than 1,300 feet.	Yes	One individual was mapped in the southern maritime scrub on-site. In addition, other individuals have been found on a south-facing slope approximately 500 feet southeast of the project site (RECON 2016).
			ANGIO	SPERMS: MONOCOTS		
AGAVACEAE AGAVE	E FAMILY					
Agave shawii var. shawii Shaw's agave	_/_	2B.1	NE, MSCP	Perennial leaf succulent; coastal bluff scrub, coastal sage scrub, maritime succulent scrub; blooms September– May; elevation less than 400 feet.	No	This species is not expected to occur as the project site is out of its known range.

				Attachment 3 sitive Plant Species		
Species' <i>Scientific Name</i> Common Name	State/Federal Status	Obse CNPS Rank	crved or wit City of San Diego	h the Potential for Occurrence Habitat/ Preference/Requirements/ Blooming Period	Observed?	Basis for Determination of Occurrence Potential
JUNCACEAE RUSH H Juncus acutus ssp. leopoldii southwestern spiny rush		4.2	_	Perennial herb (rhizomatous); coastal dunes, meadows and seeps, coastal salt marsh, riparian; blooms May–June; elevation less than 3,000 feet.	No	This species has been planted within a detention basin south of the Spectrum 2 building, approximately 200 feet east of the survey area. These planted individuals are not considered sensitive.
POACEAE GRASS H	FAMILY					
Orcuttia californica California Orcutt grass	CE/FE	1B.1	VPS, MSCP	Annual herb; vernal pools; blooms April–August; elevation 50–2,200 feet.	No	This species was not observed is not expected to occur within the survey area due to a lack of vernal pools.
THEMIDACEAE BRODIA	EA FAMILY					
Brodiaea filifolia thread-leaved brodiaea [=thread-leaf brodiaea]	CE/FT	1B.1	NE, MSCP	Perennial herb (bulbiferous); cismontane woodland, coastal sage scrub, playas, valley and foothill grassland, vernal pools; often clay soils; blooms March–June; elevation less than 2,850 feet. California endemic. Known from San Diego, Riverside, Orange, Los Angeles, and San Bernardino counties.	No	Low potential to occur. The coastal sage scrub and southern maritime chaparral are lack suitable openings for this species. There are no database records of this species within two miles of the project site (CDFW 2020b).
<i>Brodiaea orcuttii</i> Orcutt's brodiaea	_/_	1B.1	MSCP	Perennial herb (bulbiferous); closed cone coniferous forest, chaparral, meadows and seeps, valley and foothill grassland, vernal pools; mesic, clay soil; blooms May–July; elevation less than 5,600 feet.	No	Low potential to occur due to the lack of suitable habitat. There are no database records of this species within two miles of the project site (CDFW 2020b).

	Sensitive Plant Species Observed or with the Potential for Occurrence											
Species' Scientific Name State/Federal CNPS City of Habitat/ Preference/Requirements/ Observed? Basis for Determinat												
	Common Name	Status	Rank	San Diego	Blooming Period	Observeu:	Occurrence Potential					
FEDE	ERAL CANDIDATES AND	LISTED PLANTS	3		STATE LISTED PLANTS							
\mathbf{FE}	= Federally listed endang	gered			CE = State listed endangered							
\mathbf{FT}	= Federally listed threat	ened			CR = State listed rare							
\mathbf{FC}	= Federal candidate for l	listing as endanger	ed or thre	atened	CT = State listed threatened							
 CALIFORNIA NATIVE PLANT SOCIETY (CNPS): CALIFORNIA RARE PLANT RANKS (CRPR) 1A = Species presumed extinct. 1B = Species rare, threatened, or endangered in California and elsewhere. These species are eligible for state listing. 2A = Plants presumed extirpated in California, but more common elsewhere. 2B = Species rare, threatened, or endangered in California but more common elsewhere. These species are eligible for state listing. 3 = Species for which more information is needed. Distribution, endangerment, and/or taxonomic information is needed. 4 = A watch list of species of limited distribution. These species need to be monitored for changes in the status of their populations. .1 = Species seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat). .2 = Species fairly threatened in California (20-80% occurrences threatened; low degree and immediacy of threat). .3 = Species not very threatened in California (<20% of occurrences threatened; low degree and immediacy of threat or no current threats known). 												

- NE VPS
- Narrow endemic
 Vernal Pool Habitat Conservation Plan vernal pool species
 Multiple Species Conservation Program covered species $\underline{M}SCP =$

Sensitive Wildlife Species Occurring or with the Potential to Occur

C	• • • • • • • • • • • • • • • • • • • •	Attachment 4	(1 1) (*)	14 0	
8	ensitive Wildlife S	Species Occurring or with	the Potentia	Potential to	
Species' Common Name/ Scientific Name	Listing Status	Habitat Preference/ Requirements	Detected On-Site?	Occur On-Site?	Basis for Determination of Occurrence Potential
	REPTILE	\mathbf{S} (Nomenclature from Croth	ner et al. 2008)		
IGUANIDAE IGUANID LIZ	ZARDS				
Coast horned lizard Phrynosoma blainvillii [= P. corona coastal population]	tum CSC, MSCP, *	Chaparral, coastal sage scrub with fine, loose soil. Partially dependent on harvester ants for forage.	No	Low	Despite the presence of coastal sage scrub and chaparral, the site lacks fine, loose soils. This species has been known to occur within a one-mile buffer of the survey area (CDFW 2019).
SCINCIDAE SKINKS					
Coronado skink Plestiodon [=Eumeces] skiltonianus interparietalis	CSC	Grasslands, open woodlands and forest, broken chaparral. Rocky habitats near streams.	No	Not Expected	The maritime chaparral on- site is very dense and lacks broken openings. No grasslands are present on site. There are no records of this species within 2 miles of the project site (CDFW 2019).
TEIIDAE WHIPTAIL L	IZARDS	·			·
Belding's orange-throated whiptail Aspidoscelis hyperythra beldingi	CSC, MSCP	Chaparral, coastal sage scrub with coarse sandy soils and scattered brush.	No	Moderate	Although there are no database records of this species within two miles (CDFW 2019), the project site supports suitable coastal sage scrub and chaparral habitats.

		Attachment 4							
Sensitive Wildlife Species Occurring or with the Potential to Occur									
Species' Common Name/ Scientific Name San Diegan tiger whiptail Aspidoscelis tigris stejnegeri	Listing Status CSC	Habitat Preference/ Requirements Coastal sage scrub, chaparral, woodlands, and streamsides where plants are sparsely distributed.	Detected On-Site? No	Potential to Occur On-Site? Moderate	Basis for Determination of Occurrence Potential The coastal sage scrub and chaparral habitats on site are suitable for this species. The nearest record of this species is from similar				
ANNIELLIDAE LEGLESS LIZARDS					habitat approximately 0.5 mile southeast of the site (CDFW 2019).				
		TT 1 1 1/1	NT	т					
San Diegan legless lizard Anniella stebbinsi [A. pulchra pulchra]	CSC	Herbaceous layers with loose soil in coastal scrub, chaparral, and open riparian. Prefers dunes and sandy washes near moist soil.	No	Low	The coastal sage scrub and chaparral on site lack loose sandy soil. The nearest record of this species is a museum specimen collected in 1975 in the vicinity of the project site (CDFW 2020a). Project area has been substantially developed since that time, fragmenting the habitat.				
CROTALIDAE RATTLESNAKES									
Red diamond rattlesnake Crotalus ruber	CSC	Desert scrub and riparian, coastal sage scrub, open chaparral, grassland, and agricultural fields.	No	Moderate	The coastal sage scrub on site is moderately suitable to support this species. There are no database records of this species within 2 miles of the project site (CDFW 2019).				

Attachment 4 Sensitive Wildlife Species Occurring or with the Potential to Occur										
Species' Common Name/ Scientific Name	Listing Status	Habitat Preference/ Requirements	Detected On-Site?	Potential to Occur On-Site?	Basis for Determination of Occurrence Potential					
BIRDS (Nomenclature from Chesser et al. 2019 and Unitt 2004)										
ACCIPITRIDAE HAWKS, KITES, & H	EAGLES									
Cooper's hawk (nesting) Accipiter cooperii	WL, MSCP	Mature forest, open woodlands, wood edges, river groves. Parks and residential areas.	No	Low	The Torrey pines in project site are too small to provide suitable nesting habitat for this species. There are gum trees in the developed and ornamental areas of the site, but these are only marginally suitable for this species. There are several Torrey pine trees in the landscaped area between the Spectrum 5 building and the adjacent building to the west, but this area is largely too close to busy developments to provide suitable nesting habitat for this species. There are no database records of this species within 2 miles of the project site (CDFW 2019).					

		Attachment 4			
Sensi	tive Wildlife S	Species Occurring or with	the Potentia	l to Occur	
Species' Common Name/ Scientific Name	Listing Status	Habitat Preference/ Requirements	Detected On-Site?	Potential to Occur On-Site?	Basis for Determination of Occurrence Potential
FALCONIDAE FALCONS & CAR.	ACARAS				
Peregrine falcon Falco peregrinus anatum	(State Delisted), CFP, MSCP	Open coastal areas, mud flats. Rare inland. Rare fall and winter resident, casual in late spring and early summer. Local breeding populations extirpated.	No	Not Expected	No suitable open area or mud flats are present on the project site. The nearest record of this species is a 2000 observation reported along Los Peñasquitos Creek approximately 0.7 mile northeast of the project site (CDFW 2019).
RALLIDAE RAILS, GALLINU	les, & Coots				
California black rail <i>Laterallus jamaicensis cotuniculus</i>	CT, CFP	Tidal marshes, grassy marshes. Resident populations extirpated.	No	Not Expected	No salt marsh occurs in the survey area. This species has been reported in Los Peñasquitos Lagoon, which extends from the coast to approximately 0.7 mile northeast of the project site (CDFW 2019).
Light-footed Ridgway's rail Rallus obsoletus [=longirostris] levipes	FE, CE, CFP, MSCP	Salt marshes supporting <i>Spartina foliosa.</i> Localized resident.	No	Not Expected	No salt marsh occurs in the survey area. This species has been reported in Los Peñasquitos Lagoon, which extends from the coast to approximately 0.7 mile northeast of the project site (CDFW 2019).

Sensiti	ve Wildlife S	Attachment 4 Species Occurring or with	the Potentia	l to Occur	
Species' Common Name/ Scientific Name	Listing Status	Habitat Preference/ Requirements	Detected On-Site?	Potential to Occur On-Site?	Basis for Determination of Occurrence Potential
CHARADRIIDAE LAPWINGS & PLOV	ERS				
Western snowy plover (coastal population) Charadrius alexandrinus nivosus	FT, CSC, MSCP	Sandy beaches, lagoon margins, tidal mud flats. Migrant and winter resident. Localized breeding.	No	Not Expected	No sandy beaches, lagoons, or mud flats. are present in the survey area. This species has been reported at Torrey Pines State Natural Reserve but nesting at this site is uncertain (CDFW 2019).
LARIDAE GULLS, TERNS, & S	Skimmers				
California least tern (nesting colony) Sternula antillarum browni	FE, CE, CFP, MSCP	Bays, estuaries, lagoons, shoreline. Resident. Localized breeding.	No	Not Expected	No suitable estuarine or lagoon habitat is present. This species historically nested at Torrey Pines State Natural Reserve, but is reportedly extirpated, with the most recent successful breeding reported in 1976 (CDFW 2019).
VIREONIDAE VIREOS					
Least Bell's vireo (nesting) Vireo bellii pusillus	FE, CE, MSCP	Willow riparian woodlands. Summer resident.	No	Not Expected	The southern riparian scrub on-site is very limited and occurs immediately adjacent to the parking lot for the adjacent development This area is isolated and largely unsuitable to support this species. This species has reported along Los Peñasquitos Creek approximately 0.7 mile northeast of the project site (CDFW 2019).

Attachment 4 Sensitive Wildlife Species Occurring or with the Potential to Occur								
Species' Common Name/ Scientific Name	Listing Status	Habitat Preference/ Requirements	Detected On-Site?	Potential to Occur On-Site?	Basis for Determination of Occurrence Potential			
TROGLODYTIDAE WRENS								
Coastal cactus wren Campylorhynchus brunneicapillus sandiegensis	CSC, MSCP, *	Maritime succulent scrub, coastal sage scrub with <i>Opuntia</i> thickets. Rare localized resident.	No	Low	Although cactus is present, there are no suitable large cactus thickets on site. The nearest record of this species is from approximately 0.6 mile north of the project site (CDFW 2019).			
POLIOPTILIDAE GNATCATCHERS								
Coastal California gnatcatcher Polioptila californica californica	FT, CSC, MSCP	Coastal sage scrub, maritime succulent scrub. Resident.	No	Moderate	The coastal sage scrub on site (outside the MHPA) is moderately suitable for this species but the southern maritime chaparral is not suitable. There are numerous records of this species within 1 mile of the site (CDFW 2019). RECON detected this species by vocalizations within the Diegan coastal sage scrub approximately 300 feet west of the project site, also outside the MHPA (RECON 2018).			
		Attachment 4						
---	-------------------	--	----------------------	-----------------------------------	--			
Sensi	tive Wildlife S	pecies Occurring or with	the Potential	l to Occur				
Species' Common Name/ Scientific Name	Listing Status	Habitat Preference/ Requirements	Detected On-Site?	Potential to Occur On-Site?	Basis for Determination of Occurrence Potential			
PASSERELLIDAE NEW WORLD PAS								
Southern California rufous-crowned sparrow Aimophila ruficeps canescens	WL, MSCP	Coastal sage scrub, chaparral, grassland. Resident.	No	Moderate	The coastal sage scrub and southern maritime chaparral on site are suitable for this species. The nearest records of this species are from approximately 1 mile northeast of the site in very similar habitat to that found on site (CDFW 2019).			
Belding's savannah sparrow Passerculus sandwichensis beldingi	CE, MSCP	Salt marshes, lagoons dominated by <i>Salicornia</i> . Resident.	No	Not Expected	No salt marshes or lagoons are present in the survey area. This species has been reported in Los Peñasquitos Lagoon, which extends from the coast to approximately 0.7 mile northeast of the project site (CDFW 2019).			
	MAMMA	LS (Nomenclature from Bak	er et al. 2003)					
CERVIDAE DEER								
Southern mule deer Odocoileus hemionus fuliginata	MSCP	Many habitats.	No	High	This species was not observed on site, but was detected during previous RECON surveys in the vicinity. The habitat is highly suitable and has connections to larger areas of off-site habitat.			

Attachment 4									
Sensitive Wildlife Species Occurring or with the Potential to Occur									
				Potential to					
Species' Common Name/	Listing	Habitat Preference/	Detected	Occur	Basis for Determination of				
Scientific Name	Status	Requirements	On-Site?	On-Site?	Occurrence Potential				
(I) = Introduced species									
STATUS CODES									
Listed/Proposed									
FE = Listed as endangered by the federation is the federation of	eral government								
FPE = Federally proposed endangered									
FPT = Federally proposed threatened									
FT = Listed as threatened by the fede	ral government								
CE = Listed as endangered by the star									
CT = Listed as threatened by the stat	e of California								
Other									
BEPA = Bald and Golden Eagle Protection									
CFP = California fully protected species									
CSC = California Department of Fish a			01 00 · · · ·						
FC = Federal candidate for listing (tar									
to support proposals to list as er			on of proposed ru	les for these taxa	are anticipated)				
WL = California Department of Fish a									
MSCP = City and County of San Diego M		vation Program covered specie	es						
PSE = Proposed as endangered by the s		C 11 · · · ·							
- I axa listeu witii ali asterisk iali									
Taxa considered endangered			1						
 Taxa that are biologically rai Population(s) in California th 		stribution, or declining throug			with artimation within				
California	at may be peripheral	to the major portion of a taxon	s range but white	in are inreatened	with extirpation within				
	habitat that is dealir	ing in California at an alarmi	nareto (o a wot	lande rinarian al	d growth forests, desert aquatic				
systems, native grasslands)	a nabitat that is decili	ing in Camorina at an alarinn	ing rate (e.g., wet	ianus, riparian, oi	u growin lorests, desert aquatic				
systems, native grassiands)									

ATTACHMENT 5

Jurisdictional Waters Delineation Report for the Spectrum Pedestrian Bridge Project, San Diego, California

RECON

Jurisdictional Waters Delineation Report for the Spectrum Pedestrian Bridge Project, San Diego, California

Prepared for

Alexandria Real Estate Equities, Inc. 10996 Torreyana Road, Suite 250 San Diego, CA 92121

Prepared by

RECON Environmental, Inc. 3111 Camino del Rio North, Suite 600 San Diego, CA 92108 P 619.308.9333

RECON Number 9160 August 9, 2021

Royal

Beth Procsal, Senior Biologist

TABLE OF CONTENTS

Acro	nyms		iii				
1.0	Sum	mary of Findings	1				
2.0	Intro	duction	1				
3.0	Meth	hods	1				
	3.1	USACE Wetland Water of the U.S.	5				
	3.2	USACE Non-wetland Jurisdictional Waters	8				
	3.3	CDFW Waters of the State	8				
	3.4	RWQCB Waters of the State	9				
4.0	Results of Field Data						
	4.1	Vegetation	9				
	4.2	Soils	12				
	4.3	Hydrology	12				
5.0	Wetl	and Delineation	12				
	5.1	Waters of the U.S. (USACE Jurisdiction)	15				
	5.2	Waters of the State (CDFW Jurisdiction)	15				
	5.3	Waters of the State (RWQCB Jurisdiction)	15				
	5.4	Coastal Zone Wetlands (CCC Jurisdiction)	13				
6.0	Regu	ulatory Issues	16				
7.0	References Cited						

FIGURES

1:	Regional Location	2
	Project Location on USGS Map	
	Project Location on Aerial Photograph	
	Potential Waters of the U.S.	
5:	Potential Waters of the State	.14

TABLES

1:	Summary of Existing Jurisdictional Waters	. 15
----	---	------

TABLE OF CONTENTS (cont.)

PHOTOGRAPHS

1:	View of Ephemeral Drainage Surrounded by Maritime Chaparral, Facing Northwest.	
	Photo Date August 14, 2018	10
2:	View of Ephemeral Drainage Surrounded by Maritime Chaparral, Facing East.	
	Photo Date August 14, 2018	10
3:	View of Wetland Area located in Southwest Corner of Parcel, Facing Northwest.	
	Photo Date July 30, 2021	11

ATTACHMENT

Acronyms

USACE	U.S. Army Corps of Engineers
CCC	California Coastal Commission
CDFW	California Department of Fish and Wildlife
CWA	Clean Water Act
OHWM	Ordinary High Water Mark
RECON	RECON Environmental, Inc.
RWQCB	Regional Water Quality Control Board
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey

1.0 Summary of Findings

RECON Environmental, Inc. (RECON) performed a routine wetland delineation for the Spectrum Pedestrian Bridge Project (proposed conceptual project) located within in the city of San Diego, California. Methods for delineating wetlands followed guidelines set forth by the U.S. Army Corps of Engineers (USACE; 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008).

USACE federal waters of the U.S., California Department of Fish and Wildlife (CDFW), California Regional Water Quality Control Board (RWQCB) waters of the state, and California Coastal Commission (CCC) wetlands were all delineated for the proposed conceptual project. Waters of the U.S. mapped for the Spectrum Pedestrian Bridge properties include 0.058 acre of non-wetland waters. Waters of the state mapped for the project include 0.098 acre of wetlands and 0.133 acre of streambed. A total of 0.098 acre of CCC wetlands were mapped during the survey effort.

2.0 Introduction

This report describes the results of a wetland delineation conducted for the proposed conceptual project. The survey area consisted of the Spectrum 2 and 5 properties (Assessor's Parcel Numbers 340-010-4300 and 340-190-0900, respectively), located in the city of San Diego, California (Figure 1). The Applicant is proposing the installation of a free-spanning bridge that will connect the two properties. As the project bridge site design has not been finalized, the delineation was conducted within the canyon between the two properties in order to map any jurisdictional waters present that could be potentially impacted by the proposed conceptual project. The project site is found on Pueblo Lands of San Diego Land Grant, of the U.S. Geological Survey (USGS) 7.5-minute topographic map, Del Mar quadrangle (USGS 1994; Figure 2) and located to the east of Interstate 5, just east of Torrey Pines Road, and south of Science Park Road (Figure 3).

3.0 Methods

A RECON biologist performed a routine wetland delineation within the canyon between the Spectrum 2 and 5 properties on August 14, 2018, and July 30, 2021 according to the guidelines set forth by USACE (1987, 2008). A jurisdictional waters delineation is used to identify and map the extent of the wetlands and waters of the U.S. and provide information regarding jurisdictional issues.

Prior to conducting the delineation, an aerial photograph and the USGS Del Mar quadrangle were examined to aid in the location of potential waters of the U.S. on-site. Once on-site, the parcel of land was examined to determine the presence of any indicators of wetlands, including wetland vegetation, hydric soils, and hydrology. Soil test pits were located (1) within potential wetland areas and (2) in or adjacent to the spot where the boundary between wetland and upland was inferred (based on changes in the topography, hydrology, and composition of the vegetation). While in the field, the area was also examined for potential USACE non-wetland waters of the U.S. and waters of the state.



🔆 Project Location



FIGURE 1 Regional Location





Project Parcels

Feet

2,000



0 150 Feet

0



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3.1 USACE Wetland Water of the U.S.

According to the USACE manual (USACE 1987), wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances, do support a prevalence of vegetation typically adapted for life in saturated soil conditions."

Wetlands are delineated using three parameters: hydrophytic vegetation, wetland hydrology, and hydric soils. According to USACE, indicators for all three parameters must be present to qualify a wetland. The definition of a wetland includes the phrase "under normal circumstances," because there are situations in which the vegetation of a wetland has been removed or altered as a result of a recent natural event or human activities (USACE 1987).

Atypical situations and problem areas may lack one or more of the three criteria and still be considered wetlands. Background information on the previous condition of the area and/or field observations may indicate that the site meets the wetland criteria prior to disturbance. Additional delineation procedures would be employed if normal circumstances did not occur on a site. For the project survey area, atypical situations or problem areas do not occur; normal circumstances are present.

3.1.1 Regulatory Definition

In accordance with Section 404 of the Clean Water Act (CWA), USACE regulates the discharge of dredged or fill material into waters of the United States. The term "waters of the United States" is defined as the following:

- All waters currently used, or used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide;
- All interstate waters including interstate wetlands;
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds; the use, degradation, or destruction of which could affect foreign commerce including any such waters, (1) which could be used by interstate or foreign travelers for recreational or other purposes; or (2) from which fish or shellfish are, or could be, taken and sold in interstate or foreign commerce; or (3) which are used or could be used for industries in interstate commerce.
- All other impoundments of waters otherwise defined as waters of the United States under the definition;
- Tributaries of waters identified above;

- The territorial seas; and
- Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in the paragraphs above [33 Code of Federal Regulations Part 328.3(a)].

3.1.2 Wetland Parameters

Wetlands are delineated using three parameters: hydrophytic vegetation, wetland hydrology, and hydric soils. According to USACE guidelines, indicators for all three parameters must be present to qualify as a wetland.

3.1.2.1 Hydrophytic Vegetation

Hydrophytic vegetation is defined as "the sum total of macrophytic plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content" (USACE 1987). The potential wetland areas within the canyon were surveyed by walking through the project site and making observations of those areas exhibiting characteristics of jurisdictional waters or wetlands. Vegetation units with potential wetland areas were examined, and data for each vegetation stratum (i.e., tree, shrub, herb, and vine) were recorded on the datasheet provided in the 2008 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (hereafter referred to as *Arid Supplement*) (USACE 2008). The percent absolute cover of each species present was visually estimated and recorded.

The wetland indicator status of each species recorded was determined by using the list of wetland plants for the arid southwest provided by the USACE (2013). An obligate (OBL) indicator status refers to plants that have a 99 percent probability of occurring in wetlands under natural conditions. A facultative wet (FACW) indicator status refers to plants that occur in wetlands (67 to 99 percent probability), but are occasionally found in non-wetlands. A facultative (FAC) indicator status refers to plants that are equally likely to occur in wetlands or non-wetlands (estimated probability 34 to 66 percent). Facultative upland (FACU) species are more often found in upland sites. Upland (UPL) species have a high probability to occur in upland sites. A not indicated status refers to species that have insufficient data available to determine an indicator status at this time, for the local region.

Floral nomenclature for common plants follows the Jepson Online Interchange (University of California 2018). Dominant species with an indicator status of not indicated or not listed in the USACE 2013 list were evaluated as either wetland or upland indicator species based on local professional knowledge of where the species are most often observed in habitats characteristic of southern California.

There are three indicators or tests to determine hydrophytic vegetation on a site: the dominance test, prevalence index, and morphological adaptations. The 50/20 rule is a repeatable and objective procedure for selecting a dominant plant species and is recommended when data are available for all species in the community (USACE 2008). Dominant species are those plants that individually or collectively contribute more than 50 percent of the total vegetative cover plus those species that, by themselves, comprise 20 percent or more of the total cover.

If the vegetation at a particular site passes the dominance test (using the 50/20 rule), the hydrophytic vegetation criterion is considered fulfilled. If it fails the dominance test and positive indicators of hydric soils and/or wetland hydrology are present, it is necessary to apply the prevalence index. The prevalence index is a weighted-average wetland indicator status of all plant species at a test site, where each indicator status category is given a numeric code and weighted by percent cover (USACE 2008). If a prevalence index is 3.0 or less, the hydrophytic vegetation criterion is considered fulfilled.

If a site fails the prevalence index and positive indicators of hydric soils and/or wetland hydrology are present, it is necessary to assess the presence or absence of morphological adaptations. To apply this indicator, morphological features must be observed on more than 50 percent of the individuals of a FACU species living in an area where indicators of hydric soil and wetland hydrology are present (USACE 2008). Once this indicator is applied, the dominance test and/or the prevalence index are/is recalculated using a FAC indicator status of this species (USACE 2008).

3.1.2.2 Hydric Soils

A hydric soil is a soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation (USACE 1987). Hydric soil indicators are formed predominantly by the accumulation or loss of iron, manganese, sulfur, or carbon compounds (USACE 2008). The hydric soil criterion is considered fulfilled at a location if soils in the area can be inferred to have a high groundwater table, evidence of prolonged soil saturation exists, or any indicators suggesting a long-term reducing environment in the upper 18 inches of the soil profile are present.

A sample point was selected within a potential wetland area where the apparent boundary between wetland and upland was inferred based on changes in the composition of the vegetation and topography. The soil pit was dug to a depth of at least 18 inches or to a depth necessary to determine soil color, evidence of soil saturation, depth to groundwater, and indicators of a reducing soil environment (e.g., mottling, gleying, and sulfidic odor).

Hydric soil indicators are presented in three groups in the *Arid Supplement* (USACE 2008): "all soils, sandy soils, and loamy and clayey soils." Indicators applicable to all soil textures are indicated as A1 through A10 on the datasheet and include histosols, histic epipedon, stratified layers, and muck, among others. Indicators of sandy soils are noted as S1 through S6 and include sandy gleyed matrix, sandy redox, and stripped matrix. F1 (loamy mucky mineral) through F9 (vernal pools) are indicators of hydric conditions within loamy and clayey soils. A complete description of each of the hydric soil indicators is provided in the 2008 *Arid Supplement* and should be referenced during each delineation.

3.1.2.3 Wetland Hydrology

The presence of wetland hydrology indicators confirm that inundation or saturation has occurred on a site, but may not provide information about the timing, duration, or frequency of the event. Hydrology features are generally the most ephemeral of the three wetland parameters (USACE 2008).

In the 2008 *Arid Supplement*, wetland hydrology indicators are divided into four groups. Those that are determined based on direct observation are in Group A. These include the presence of surface

water, a high-water table, and saturation. Water marks, drift deposits, surface soil cracks, and other indicators of flooding or ponding fall within Group B. Group C consists of indicators that provide indirect evidence that a site was saturated recently, such as the presence of sulfidic odors or oxidized rhizospheres along living roots. Group D consists of vegetation and soil features that indicate recent wet conditions, such as the FAC-neutral test or a shallow aquitard (USACE 2008). These indicators are further classified as primary or secondary indicators.

Hydrologic information for the site was obtained by reviewing USGS topographic maps and by directly observing hydrology indicators in the field. The wetland hydrology criterion is considered fulfilled at a location if, based upon the conclusions inferred from the field observations, an area has a high probability of being periodically inundated or has soils saturated to the surface at some time during the growing season to develop anaerobic conditions in the surface soil environment, especially the root zone (USACE 1987). If at least one primary indicator or at least two secondary indicators are found at a sample point, the wetland hydrology criterion is considered fulfilled.

3.2 USACE Non-wetland Jurisdictional Waters

The USACE also requires the delineation of non-wetland jurisdictional waters of the U.S. These waters must have strong hydrology indicators such as the presence of seasonal flows and an ordinary high water mark (OHWM). An OHWM is defined as:

... that line on the shore established by the fluctuations of water and indicated by physical characteristics such as [a] clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas (33 Code of Federal Regulations Part 328.3).

Areas delineated as non-wetland jurisdictional waters may lack wetland vegetation or hydric-soil characteristics. Hydric-soil indicators may be missing because topographic position precludes ponding and subsequent development of hydric soils. Absence of wetland vegetation can result from frequent scouring due to rapid water flow. These types of jurisdictional waters are delineated by the lateral and upstream/downstream extent of the OHWM of the particular drainage or depression.

3.3 CDFW Waters of the State

Under Sections 1600–1607 of the Fish and Game Code, CDFW regulates activities that would divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. CDFW has jurisdiction over riparian habitats (e.g., southern willow scrub) associated with watercourses. Jurisdictional waters are delineated by the outer edge of riparian vegetation or at the top of the bank of streams or lakes, whichever is wider.

3.4 RWQCB Waters of the State

RWQCB is the regional agency responsible for protecting water quality in California. The jurisdiction of this agency includes waters of the state as mandated by both the federal CWA Section 401 and the California Porter-Cologne Water Quality Control Act.

3.5 CCC Coastal Wetlands

CCC is the regional agency responsible for protecting the natural resources of the defined Coastal Zone in California. The jurisdiction of this agency includes wetlands within the Coastal Zone which meet a one-parameter definition that only requires evidence of a single parameter to establish wetland conditions as follows:

Wetland shall be defined as land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent and drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salts or other substances in the substrate (14 California Code Regulations Section 13577).

4.0 Results of Field Data

One ephemeral drainage and wetland area were mapped during the survey effort (Photographs 1-3). A description of the hydrophytic vegetation units observed, soil types encountered, and a discussion of the local hydrology in the survey area are presented below. Copies of the field data forms summarizing information on vegetation, soils, and hydrology observed at each sample site are provided in Attachment 1.

4.1 Vegetation

One area with hydrophytic vegetation (i.e., dominated by OBL, FACW, and/or FAC hydrophytic indicator plant species) was observed in the survey area. This area consists of southern riparian scrub vegetation strongly dominated by arroyo willow (*Salix lasiolepis*; a FACW species) with 100 percent canopy cover. The understory contained a small number of pampas grass (*Cortaderia selloana*; a FACU species), with a total cover of one percent. As this area is dominated by a FACW species, it meets the hydrophytic vegetation criterion. The remaining portions of the ephemeral drainage are vegetated with maritime chaparral, coastal sage scrub, and disturbed land vegetation communities/land cover types that are dominated by upland plant species and do not satisfy the hydrophytic vegetation criterion.



PHOTOGRAPH 1 View of Ephemeral Drainage Surrounded by Maritime Chaparral, Facing Northwest. Photo Date August 14, 2018.

RECON

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PHOTOGRAPH 2 View of Ephemeral Drainage Surrounded by Maritime Chaparral, Facing East. Photo Date August 14, 2018.



PHOTOGRAPH 3 View of Wetland Area Located in the Southwest Corner of Parcel, Facing Northwest. Photo Date: July 30, 2021



4.2 Soils

One soil type, Altamont clay, 30 to 50 percent slopes, is mapped within the drainage area (U.S. Department of Agriculture [USDA] 1973). Characteristics of this soil type is summarized from the USDA Soil Survey of San Diego Area, California (USDA 1973), and the local hydric soil list (USDA 1992).

Altamont clay, 30 to 50 percent slopes, is steep and is 20 to 32 inches deep over shale. Runoff is rapid and the erosion hazard is high. The available water-holding capacity is 3.5 to 5 inches. Included in the mapping are small areas of Linne clay loam and areas where the soils are only 10 inches deep over shale (USDA 1973). The topsoil ranges from a dark brown (10YR 4/3, moist) to pale brown (10YR 6/3) in color and texture is strong and course with very fine roots. No hydric soil indicators were observed during the survey effort.

4.3 Hydrology

One drainage runs through the canyon bottom and is fed by a culvert leading from the adjacent developments to the west, just outside and to the west of the Spectrum 2 parcel. The channel varies in width and depth depending on the amount of vegetation and meander.

The majority of the water that enters the site comes as runoff during the wet season. Smaller dry season flows may enter the site due to irrigation and other urban runoff sources. The flows drain to the east where the drainage then meets up with additional flows from another culvert just outside of the east side of the parcel where it continues off-site to the south through the canyon system. Once it reaches Tower Road, the drainage enters a storm drain system where it flows into Carrol Canyon Creek, which eventually reaches the Los Peñasquitos Lagoon and then flows into the Pacific Ocean.

One secondary wetland hydrology indicator, drift deposits, was observed within the drainage near soil pits 1, 2, and 4. No primary wetland indicators were observed during the survey effort.

5.0 Wetland Delineation

The location of federal waters of the U.S. and waters of the state are shown on Figures 4 and 5, respectively. A summary of the acreages of potentially jurisdictional waters delineated according to federal (USACE) and state (CDFW, RWQCB, and CCC) jurisdiction are provided in Table 1 (see Figures 4 and 5).



RECON



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Potential Waters of the U.S.





- Concrete-lined Brow Ditch

CDFW/RWQCB Streambed
 CDFW/RWQCB/CCC/City Wetland
 Estimated Channel
 Estimated Channel Connection

FIGURE 5 Potential Waters of the State

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Table 1 Summary of Potential Existing Jurisdictional Waters						
Agency	Jurisdictional Wetlands/Waters	Acres				
	Wetland	0.000				
USACE	Non-wetland waters of the U.S.	0.158				
	Total Waters of the U.S.	0.158				
	Riparian wetland	0.098				
CDFW*/RWQCB	Streambed	0.158				
	Total Waters of the State	0.256				
ССС	Coastal Zone Wetlands	0.098				
*CDFW area of jurisdiction includes all USACE jurisdictional waters.						

5.1 Waters of the U.S. (USACE Jurisdiction)

The potential USACE jurisdictional areas considered to be non-wetland waters consist of an ephemeral drainage channel that flows into the properties from a small culvert from the adjacent developments to the west (see Figure 4). The limit of the non-wetland waters was estimated by observations and measurements of the OHWM, including low flow channels and active floodplain.

Potential USACE jurisdiction area on-site totals 0.158 acre of non-wetland waters of the U.S. No wetland waters of the U.S. were mapped along the drainage.

5.2 Waters of the State (CDFW Jurisdiction)

Potential waters of the State under the jurisdiction of CDFW include the ephemeral streambed and the riparian scrub just east of the storm drain outlet. The limits of the CDFW streambed are delineated from the top of the bank of the top of the bank and riparian wetland by the outer extent of the drip line of the riparian vegetation (see Figure 5). A total of 0.256 acre of CDFW jurisdictional areas occur within the canyon between the properties.

5.3 Waters of the State (RWQCB Jurisdiction)

The RWQCB takes jurisdiction over all waters of the state and all waters of the U.S. as mandated by both the federal CWA and the California Porter-Cologne Water Quality Control Act. The potential extent of RWQCB jurisdiction in this case is 0.256 acre, the same as the limits of the CDFW jurisdictional waters of the state.

5.4 Coastal Zone Wetlands (CCC Jurisdiction)

The CCC takes jurisdiction over wetlands within the Coastal Zone (see Figure 5) as per the California Coastal Act. The CCC definition for wetlands includes all features that meet one wetland parameter from the 1987 USACE Wetlands Delineation Manual. The potential extent of CCC jurisdiction in this case is 0.098 acre, the same as the limits of the CDFW riparian wetland.

6.0 Regulatory Issues

USACE, CDFW, RWQCB, and CCC jurisdictional waters are regulated by federal and state governments under a no-net-loss policy, and all impacts are considered significant and should be avoided to the greatest extent possible. Unavoidable and authorized impacts would require mitigation through habitat creation, enhancement, or preservation as determined by a qualified restoration biologist in consultation with the regulatory agencies during the permitting process. Any impacts to USACE, CDFW, RWQCB, and/or CCC jurisdictional waters would require a Section 404 permit authorization from USACE, a 1600 Streambed Alteration Agreement from CDFW, a 401 State Water Quality Certification from RWQCB, and approval from the CCC along with compensatory mitigation.

7.0 References Cited

- U.S. Army Corps of Engineers (USACE)
 - 1987 Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1, Department of the Army. January.
 - 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region.
 - 2013 National Wetland Plant List
- U.S. Department of Agriculture (USDA)
 - 1973 Soil Survey, San Diego Area, California. Soil Conservation Service and Forest Service. Roy H. Bowman, ed. San Diego. December.
 - 1992 Hydric Soil List. Natural Resources Conservation Service. Escondido, CA Field Office. Field Office Technical Guide. March.
- U.S. Geological Survey (USGS)
 - 1994 Del Mar Quadrangle 7.5-Minute Topographic Map.

University of California

2018 Jepson eFlora. University and Jepson Herbaria, University of California, Berkeley. March. http://ucjeps.berkeley.edu/eflora/.

ATTACHMENT 1

Wetland Delineation Data Sheets

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Spectrum Pedestrian Bridge 0	City/County: San Diego, San Diego Sampling Date: 8.14.18
Applicant/Owner: Alexandria Real Estate Equities, Inc.	State: CA Sampling Point: 1
Investigator(s): B. Procsal	Section, Township, Range: Del Mar quadrangle, Pueblo Lands of SD landgrant
Landform (hillslope, terrace, etc.): drainage	Local relief (concave, convex, none): concave Slope (%): 0-2
Subregion (LRR): LRR-C Lat: 32.9	00315 Long: -117.239875 Datum: NAD 83
Soil Map Unit Name: Altamont clay, 30 to 50 percent slopes	NWI classification: Riverine
Are climatic / hydrologic conditions on the site typical for this time of year	r? Yes X No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrologysignificant	ly disturbed? No Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology naturally p	oroblematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No X No X No X	Is the Sampled Area within a Wetland?	Yes	NoX	
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Remarks: The drainage is predominantly unvegetated and rocky. It is located at the bottom of the urban canyon and adjacent to maritime chaparral.

VEGETATION – Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test	worksheet			
Tree Stratum (Plot size:) 1.)	% Cover	Species?	Status	Number of Domin That Are OBL, FA			1	(A)
2 3				Total Number of I Species Across A			4	(B)
4.				Percent of Domina				
		= Total Cove	er	That Are OBL, FA	CW, or FAC	C:	25%	(A/B)
Sapling/Shrub Stratum (Plot size:)								
1. Cortaderia selloana	2	Y	FACU	Prevalence Index	x workshee	et:		
2.				Total % Cove	r of:	Mu	Itiply by:	
3.				OBL species	0	x 1 =	0	
Λ				FACW species	0	x 2 =	0	
5.				FAC species	1	x 3 =	3	
	2	= Total Cove	er	FACU species		x 4 =	4	
Herb Stratum (Plot size:)				UPL species	2	x 5 =	10	
1. Pseudognaphalium bioletti	<1	Y	UPL	Column Totals:	4	(A)	17	(B)
2. Pseudognaphalium microcephalium	<1	Y	UPL					
3. Sonchus asper	<1	Y	FAC	Prevalence Index = B/A = <u>4.25</u>			_	
4.				Hydrophytic Vegetation Indicators:				
5.				Dominance Test is >50%				
6				Prevalence				
7.				Morphologi			vide supr	orting
7 8.					Remarks or			
0	1	= Total Cov	/er	Problematio	- Hydrophyt	ic Veneta	tion ¹ (Exr	lain)
Woody Vine Stratum (Plot size:)					s nyaropnyt	ie vegeta		nan i)
1				¹ Indicators of hyd	dric soil and	wetland I	hydrology	must
2				be present, unles				maor
۲		= Total Cove	or .	l huduo u hudio				
		- 10tal 0000		Hydrophytic Vegetation				
% Bare Ground in Herb Stratum 97 % Cover of Biotic Crust Present? Yes No X								
Remarks: The channel is at the bottom of an urban car	iyon and su	rrounded by u	pland vegeta	ation and is generally	y unvegetate	ed.		

Sampling Point: 1

Depth	Matrix		Re	edox Featu	res		-	
nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
10"	10YR4/3	100					Sand	sand is cool/moist
fusal at								
"								
					·			
					·		·	
(no: C=Con	centration, D=Depletion		Matrix CS-Covera	d or Coatod	Sand Crain	2	agation: DI -Dara	ining PC-Post Channel M-Matrix
	Indicators: (Applica					5. 1		Lining, RC=Root Channel, M=Matrix.
Histosol				Redox (S5)				ck (A9) (LRR C)
-	bipedon (A2)			d Matrix (S				ck (A10) (LRR B)
Black Hi	,			Mucky Min	,			l Vertic (F18)
Hydroge	n Sulfide (A4)			Gleyed Ma			Red Par	ent Material (TF2)
_	l Layers (A5) (LRR C	;)		d Matrix (F	-		Other (E	xplain in Remarks)
	ick (A9) (LRR D)			Dark Surfa	· · ·			
-	d Below Dark Surface	e (A11)	·	d Dark Sur	· · ·		3 Indiantara at	budraphytic versitation and
_	ark Surface (A12) lucky Mineral (S1)			Depression Pools (F9)	IS (FO)			hydrophytic vegetation and hydrology must be present,
			Vontari				woulding i	lydrology maar be present,
	• • • •						unless di	sturbed or problematic.
Sandy G	Bleyed Matrix (S4)						unless di	sturbed or problematic.
Sandy G	Gleyed Matrix (S4)						unless di	sturbed or problematic.
Sandy G estrictive L Type:	Sleyed Matrix (S4)		_					
Sandy G strictive L Type: Depth (inch	Sleyed Matrix (S4) Layer (if present): These in the second						Hydric Soil Pres	ent? Yes <u>No X</u>
Sandy G strictive L Type: Depth (inch marks: No	Bleyed Matrix (S4) ayer (if present): nes): b hydric soil indicator	s were observ	 ved. The soil pit w				Hydric Soil Pres	ent? Yes No _X d and bank. The soil type for the su
Sandy G sstrictive L Type: Depth (inch marks: No ea is mapp	Bleyed Matrix (S4) ayer (if present): nes): b hydric soil indicator	s were observ y. However, c	— ved. The soil pit w courser sandy part	ticles (map	ped as Ca	rlsbad gra	Hydric Soil Pres has a defined be velly sandy loam	ent? Yes <u>No X</u> d and bank. The soil type for the su
Sandy G strictive L ype: Depth (inch marks: No	Bleyed Matrix (S4) ayer (if present): nes): b hydric soil indicator ed as Almamont Clay	s were observ y. However, c	— ved. The soil pit w courser sandy part	ticles (map	ped as Ca	rlsbad gra	Hydric Soil Pres has a defined be velly sandy loam	ent? Yes <u>No X</u> d and bank. The soil type for the su
Sandy G strictive L ype: Depth (inch marks: No ea is mapp en develop	Bleyed Matrix (S4) ayer (if present): hes): b hydric soil indicator: ed as Almamont Clay pment occurred west	s were observ y. However, c	— ved. The soil pit w courser sandy part	ticles (map	ped as Ca	rlsbad gra	Hydric Soil Pres has a defined be velly sandy loam	ent? Yes <u>No X</u> d and bank. The soil type for the su
Sandy G strictive L ype: Depth (inch marks: No a is mapp en develop	Sleyed Matrix (S4) ayer (if present): by hydric soil indicator: ad as Almamont Clar pment occurred west Y	s were observ y. However, c	— ved. The soil pit w courser sandy part	ticles (map	ped as Ca	rlsbad gra	Hydric Soil Pres has a defined be velly sandy loam oil at this location	ent? Yes <u>No X</u> d and bank. The soil type for the su could have been transported from n.
Sandy G strictive L ype: Depth (inch marks: No a is mapp en develop DROLOG etland Hy	Sleyed Matrix (S4) ayer (if present): hes): b hydric soil indicators ed as Almamont Clay pment occurred west ay drology Indicators:	s were observ y. However, c of the proper	ved. The soil pit w ourser sandy part ties and/or may b	ticles (map e unmapp	ped as Ca	rlsbad gra	Hydric Soil Pres has a defined be velly sandy loam oil at this location	ent? Yes <u>No X</u> d and bank. The soil type for the su could have been transported from n. n .
Sandy G strictive L Type: Depth (inch marks: No a is mapp en develop DROLOG etland Hy imary India	Sleyed Matrix (S4) ayer (if present): nes): b hydric soil indicator ed as Almamont Clay pment occurred west iY drology Indicators: cators (minimum of o	s were observ y. However, c of the proper	ved. The soil pit w ourser sandy part ties and/or may b check all that appl	ticles (map e unmappo y)	ped as Ca	rlsbad gra	Hydric Soil Pres has a defined be velly sandy loarr oil at this location <u>Seco</u> V	eent? Yes <u>No X</u> d and bank. The soil type for the su) could have been transported from n. <u>ndary Indicators (2 or more requi</u> /ater Marks (B1) (Riverine)
Sandy G strictive L ype: Depth (inch marks: No a is mapp en develop DROLOG etland Hy imary India Surface	Sleyed Matrix (S4) ayer (if present): tenes): b hydric soil indicator: ed as Almamont Clay pment occurred west iY drology Indicators: cators (minimum of o Water (A1)	s were observ y. However, c of the proper	ved. The soil pit w courser sandy part ties and/or may b <u>check all that appl</u>	ticles (map e unmappo y) st (B11)	ped as Ca	rlsbad gra	Hydric Soil Pres has a defined be velly sandy loarr oil at this location <u>Seco</u> S	eent? Yes <u>No X</u> d and bank. The soil type for the su) could have been transported from n. <u>ndary Indicators (2 or more requi</u> /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine)
Sandy G strictive L ype: Depth (inch marks: No a is mapp en develop DROLOG etland Hy imary India Surface High Wa	Sleyed Matrix (S4) ayer (if present): tenes): tenes(tenes): te	s were observ y. However, c of the proper	 ved. The soil pit w courser sandy part ties and/or may b <u>check all that appl</u> <u></u> Salt Crus Biotic Cru	ticles (map e unmappe y) st (B11) ust (B12)	ped as Ca	rlsbad gra	Hydric Soil Pres has a defined be velly sandy loam oil at this location <u>Seco</u> 	eent? Yes <u>No X</u> d and bank. The soil type for the su could have been transported from n. <u>ndary Indicators (2 or more requi</u> vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine)
Sandy G strictive L ype: Depth (inch marks: No ea is mapp en develop DROLOG etland Hy imary India Surface High Wa Saturatio	Sleyed Matrix (S4) ayer (if present): by dric soil indicator: a Almamont Claipment occurred west Y drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3)	s were obsern y. However, c of the proper ne required; c	ved. The soil pit w courser sandy part ties and/or may b <u>check all that appl</u> Salt Crus Biotic Cru Aquatic In	ticles (map e unmappe y) st (B11) ust (B12) nvertebrate	ped as Ca ed inclusio	rlsbad gra	Hydric Soil Pres has a defined be velly sandy loam oil at this location <u>Seco</u> 	eent? Yes <u>No X</u> d and bank. The soil type for the su o could have been transported from n. ndary Indicators (2 or more requi vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10)
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Sandy G Strictive L Type: Depth (inch marks: No a is mapp en develop DROLOG DROLOG Catland Hy imary India Surface High Wa Saturatio Water N Sedimen	Sleyed Matrix (S4) ayer (if present): tes): b hydric soil indicators ed as Almamont Clay pment occurred west b y drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriveri nt Deposits (B2) (Nor	s were observ y. However, c of the proper <u>ne required; c</u> ne) nriverine)	ved. The soil pit w ourser sandy part ties and/or may b <u>check all that appl</u> Salt Crus Biotic Cru Aquatic li Aquatic li Hydroger Oxidized	ticles (map e unmappe y) st (B11) ust (B12) nvertebrate n Sulfide C Rhizosphe	ped as Ca ed inclusio es (B13) edor (C1) eres along	rlsbad gra ns in the s	Hydric Soil Pres has a defined be velly sandy loam oil at this location Seco 	eent? Yes <u>No X</u> d and bank. The soil type for the su) could have been transported from n. ndary Indicators (2 or more requi vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7)
Sandy G strictive L ype: Depth (inch marks: No a is mapp en develop DROLOG etland Hy imary India Surface High Wa Saturatia Water M Sedimen Drift Dep	Sleyed Matrix (S4) ayer (if present): tes): b hydric soil indicator ed as Almamont Clay pment occurred west b f f drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriver obsits (B2) (Nor bosits (B3) (Nonriver)	s were observ y. However, c of the proper <u>ne required; c</u> ne) nriverine)	ved. The soil pit w ourser sandy part ties and/or may b 	ticles (map e unmappe y) st (B11) ust (B12) nvertebrate n Sulfide C Rhizosphe e of Reduc	ped as Ca ed inclusio es (B13) edor (C1) eres along ed Iron (C4	rlsbad gra ns in the s Living Rod	Hydric Soil Pres has a defined be velly sandy loam oil at this location Seco 	eent? Yes <u>No X</u> d and bank. The soil type for the su) could have been transported from n. ndary Indicators (2 or more requi /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rrift Deposits (B3) (Riverine) rrainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rrayfish Burrows (C8)
Sandy G strictive L ype: Depth (inch marks: No a is mapp en develop DROLOG etland Hy imary Indio Surface High Wa Saturatio Water M Sedimen Drift Dep Surface Surface	Sleyed Matrix (S4) ayer (if present): tess): b hydric soil indicator: ed as Almamont Clay pment occurred west iY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriveri nt Deposits (B2) (Nor posits (B3) (Nonriver Soil Cracks (B6)	s were observ y. However, c of the proper <u>ne required; c</u> ne) nriverine) ine)	ved. The soil pit w courser sandy part ties and/or may b <u>check all that appl</u> Salt Crus Biotic Cru Aquatic lu Aquatic lu	ticles (map e unmappe st (B11) ust (B12) nvertebrate n Sulfide C Rhizosphe e of Reduc ron Reduct	ped as Ca ed inclusio es (B13) bdor (C1) eres along ed Iron (C4 ion in Tille	rlsbad gra ns in the s Living Rod	Hydric Soil Pres has a defined be velly sandy loarr oil at this location <u>Seco</u> <u>X</u> C Dts (C3) S	eent? Yes <u>No X</u> d and bank. The soil type for the su b) could have been transported from n. ndary Indicators (2 or more requi vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (
Sandy G strictive L ype: Depth (inch marks: No a is mapp en develop DROLOG etland Hy imary India Surface High Wa Saturatio Water M Sedimen Drift Dep Surface Inundati	Sleyed Matrix (S4) ayer (if present): tes): b hydric soil indicator ed as Almamont Clay pment occurred west b f f drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriver obsits (B2) (Nor bosits (B3) (Nonriver)	s were observ y. However, c of the proper <u>ne required; c</u> ne) nriverine) ine)		ticles (map e unmappe st (B11) ust (B12) nvertebrate n Sulfide C Rhizosphe e of Reduct con Reduct ck Surface	ped as Ca ed inclusio es (B13) bdor (C1) eres along ed Iron (C4 ion in Tilled (C7)	rlsbad gra ns in the s Living Roo	Hydric Soil Pres has a defined be velly sandy loam oil at this location <u>Seco</u> <u>X</u> D <u>X</u> D S (C3) (C3) (C3) (C3) (C3) (C3) (C3) (C3)	eent? Yes <u>No X</u> d and bank. The soil type for the su o could have been transported from n. ndary Indicators (2 or more requi Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rrayfish Burrows (C8) aturation Visible on Aerial Imagery hallow Aquitard (D3)
Sandy G strictive L Type: Depth (inch marks: No a is mapp en develop DROLOG otland Hy imary India Surface High Wa Saturatia Water N Sedimen Drift Dep Surface Surface 	Sleyed Matrix (S4) ayer (if present): tes): b hydric soil indicator: ed as Almamont Clay pment occurred west b f f drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriveri nt Deposits (B2) (Nor posits (B3) (Nonriver Soil Cracks (B6) on Visible on Aerial In tained Leaves (B9)	s were observ y. However, c of the proper <u>ne required; c</u> ne) nriverine) ine)		ticles (map e unmappe st (B11) ust (B12) nvertebrate n Sulfide C Rhizosphe e of Reduc ron Reduct	ped as Ca ed inclusio es (B13) bdor (C1) eres along ed Iron (C4 ion in Tilled (C7)	rlsbad gra ns in the s Living Roo	Hydric Soil Pres has a defined be velly sandy loam oil at this location <u>Seco</u> <u>X</u> D <u>X</u> D S (C3) (C3) (C3) (C3) (C3) (C3) (C3) (C3)	eent? Yes <u>No X</u> d and bank. The soil type for the su b) could have been transported from n. ndary Indicators (2 or more requi vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (
Sandy G strictive L Type: Depth (inch marks: No a is mapp en develop DROLOG etland Hy imary Indio Surface High Wa Saturatio Water M Sedimen Drift Dep Surface Inundati Water-S	Sleyed Matrix (S4) ayer (if present): tes): by hydric soil indicator: ed as Almamont Clay pment occurred west by drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonriveri nt Deposits (B2) (Nor bosits (B3) (Nonriver Soil Cracks (B6) on Visible on Aerial In itained Leaves (B9) vations:	s were observ y. However, c of the proper <u>ne required; c</u> ne) nriverine) rine) magery (B7)	ved. The soil pit w courser sandy part ties and/or may b <u>check all that appl</u> <u>Salt Crus</u> <u>Biotic Cru</u> <u>Aquatic lu</u> <u>Hydroger</u> <u>Oxidized</u> <u>Presence</u> <u>Recent Ir</u> <u>Chin Muc</u> <u>Other (Ex</u>	ticles (map e unmappe y) st (B11) ust (B12) nvertebrate n Sulfide C Rhizosphe e of Reduc ron Reduct con Reduct k Surface xplain in Re	ped as Ca ed inclusio es (B13) bdor (C1) eres along ed Iron (C4 ion in Tilled (C7)	rlsbad gra ns in the s Living Roo	Hydric Soil Pres has a defined be velly sandy loam oil at this location <u>Seco</u> <u>X</u> D <u>X</u> D S (C3) (C3) (C3) (C3) (C3) (C3) (C3) (C3)	eent? Yes <u>No X</u> d and bank. The soil type for the su o could have been transported from n. ndary Indicators (2 or more requi Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rrayfish Burrows (C8) aturation Visible on Aerial Imagery hallow Aquitard (D3)
Sandy G strictive L Type: Depth (inch marks: No ea is mapp ien develop DROLOG Tetland Hy rimary India Surface High Wa Saturatio Water M Sedimen Drift Dep Surface Inundati Water-S DI Observ rface Water	Sleyed Matrix (S4) ayer (if present): by dric soil indicator: ed as Almamont Clay pment occurred west y drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (Nor boosits (B3) (Nonriver Soil Cracks (B6) on Visible on Aerial In itained Leaves (B9) vations: er Present? Ye	s were observ y. However, c of the proper <u>ne required; c</u> ne) nriverine) magery (B7) es No	ved. The soil pit w courser sandy part ties and/or may b <u>check all that appl</u> <u>Salt Crus</u> <u>Biotic Cru</u> <u>Aquatic lu</u> <u>Hydroger</u> <u>Oxidized</u> <u>Presence</u> <u>Recent Ir</u> <u>Chin Muc</u> <u>Other (E)</u>	ticles (map e unmappe y) st (B11) ust (B12) nvertebrate n Sulfide C Rhizosphe e of Reduc ron Reduct con Reduct sk Surface xplain in Re	ped as Ca ed inclusio es (B13) bdor (C1) eres along ed Iron (C4 ion in Tilled (C7)	rlsbad gra ns in the s Living Roo	Hydric Soil Pres has a defined be velly sandy loam oil at this location <u>Seco</u> <u>X</u> D <u>X</u> D S (C3) (C3) (C3) (C3) (C3) (C3) (C3) (C3)	eent? Yes <u>No X</u> d and bank. The soil type for the su o could have been transported from n. ndary Indicators (2 or more requi Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rrayfish Burrows (C8) aturation Visible on Aerial Imagery hallow Aquitard (D3)
Sandy G strictive L Type: Depth (incl marks: No ea is mapp en develop DROLOG etland Hy imary India Surface High Wa Saturatio Saturatio Drift Dep Surface Inundati Water-S eld Observ rface Water	Sleyed Matrix (S4) ayer (if present): ayer (if present): by dric soil indicator: ed as Almamont Clay pment occurred west ay drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver ater Table (A2) on (A3) Marks (B1) (Nonriver Soil Cracks (B6) on Visible on Aerial In tained Leaves (B9) vations: er Present? Ye Present? Ye	s were observ y. However, c of the proper <u>ne required; c</u> <u>ne required; c</u> <u>ne)</u> <u>nriverine)</u> magery (B7) <u>es</u> No es No	ved. The soil pit w courser sandy part ties and/or may b <u>check all that appl</u> <u>Salt Crus</u> <u>Biotic Cru</u> <u>Aquatic lu</u> <u>Hydroger</u> <u>Oxidized</u> <u>Presence</u> <u>Recent lr</u> <u>Chin Muc</u> <u>Other (Ex</u> o <u>X</u> Depth (inc o <u>X</u> Depth (inc	ticles (map e unmappe y) st (B11) ust (B12) nvertebrate n Sulfide C Rhizosphe e of Reduct con Reduct con Reduct con Reduct k Surface kplain in Re ches):	ped as Ca ed inclusio es (B13) bdor (C1) eres along ed Iron (C4 ion in Tilled (C7)	Isbad gra ns in the s Living Rod I) d Soils (Cf	Hydric Soil Pres has a defined be velly sandy loam oil at this location Seco 	eent? Yes <u>No X</u> d and bank. The soil type for the su of could have been transported from the support of the su
Sandy G strictive L Type: Depth (incl- marks: No ca is mapp en develop DROLOG etland Hy imary India Surface High Wa Saturatio Drift Dep Surface Inundati Water-S eld Observer frace Water Table turation Pr	Sleyed Matrix (S4) ayer (if present): ayer (if present): by dric soil indicator: ed as Almamont Clay pment occurred west ay drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver ater Table (A2) on (A3) Marks (B1) (Nonriver Soil Cracks (B6) on Visible on Aerial In tained Leaves (B9) vations: er Present? Ye Present? Ye	s were observ y. However, c of the proper <u>ne required; c</u> <u>ne required; c</u> <u>ne)</u> <u>nriverine)</u> magery (B7) <u>es</u> No es No	ved. The soil pit w courser sandy part ties and/or may b <u>check all that appl</u> <u>Salt Crus</u> <u>Biotic Cru</u> <u>Aquatic lu</u> <u>Hydroger</u> <u>Oxidized</u> <u>Presence</u> <u>Recent Ir</u> <u>Chin Muc</u> <u>Other (E)</u>	ticles (map e unmappe y) st (B11) ust (B12) nvertebrate n Sulfide C Rhizosphe e of Reduct con Reduct con Reduct con Reduct k Surface kplain in Re ches):	ped as Ca ed inclusio es (B13) bdor (C1) eres along ed Iron (C4 ion in Tilled (C7)	Isbad gra ns in the s Living Rod I) d Soils (Cf	Hydric Soil Pres has a defined be velly sandy loam oil at this location <u>Seco</u> <u>X</u> D <u>X</u> D S (C3) (C3) (C3) (C3) (C3) (C3) (C3) (C3)	eent? Yes <u>No X</u> d and bank. The soil type for the su of could have been transported from the support of the su

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Spectrum Pedestrian Bridge C	City/County: San Diego, San Diego Sampling Date: 8.14.18
Applicant/Owner: Alexandria Real Estate Equities, Inc.	State: CA Sampling Point: 2
Investigator(s): B. Procsal	Section, Township, Range: Del Mar quadrangle, Pueblo Lands of SD landgrant
Landform (hillslope, terrace, etc.): drainage	Local relief (concave, convex, none): <u>concave</u> Slope (%): <u>0-2</u>
Subregion (LRR): LRR-C Lat: 32.90	00388 Long: -117.240127 Datum: NAD 83
Soil Map Unit Name: Altamont clay, 30 to 50 percent slopes	NWI classification: Riverine
Are climatic / hydrologic conditions on the site typical for this time of yea	r? Yes X No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrologysignificant	ly disturbed? No Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology naturally p	roblematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No X No X No X	Is the Sampled Area within a Wetland?	Yes	_ NoX	

Remarks: The drainage is dominantly by non-native pampus grass and its litter. Upland vegetation occurs on the slopes surrounding the drainage.

VEGETATION – Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test w	vorkshee	t:		
<u>Tree Stratum</u> (Plot size:) 1	% Cover	Species?	Status	Number of Dominar That Are OBL, FAC			0	(A)
2				Total Number of Do Species Across All			1	(B)
4.			مد مد	Percent of Dominar That Are OBL, FAC			0	(A/B)
Sapling/Shrub Stratum (Plot size:)		rotar cove						
1. Cortaderia selloana	100	Ν	FACU	Prevalence Index	workshee	ət:		
2.				Total % Cover of	of:	Mu	Itiply by:	
3				OBL species		x 1 =		
 4.				FACW species				
• 5								_
	100	= Total Cove	er	FACU species	100	x 4 =	400	
Herb Stratum (Plot size:)				UPL species		x 5 =		
1				Column Totals:	100	(A)	400	(B)
2.				Drevelance	laday – D			
3.				Prevalence	index = B	A = 4.0		
4				Hydrophytic Vege	tation Inc	licators:		
5.				Dominance T	est is >50)%		
ð.				Prevalence Ir	ndex is ≤3	5.0 ¹		
7.				Morphologica	al Adaptat	ions ¹ (Pro	vide sup	porting
3.				data in Re	emarks or	on a sepa	arate she	et)
		= Total Cov	/er	Problematic I	Hydrophyt	tic Vegeta	tion ¹ (Ex	plain)
Noody Vine Stratum (Plot size:)	;					Ū		,
1				¹ Indicators of hydri	ic soil and	wetland	hydrology	/ must
2.				be present, unless	disturbed	d or proble	ematic.	
		= Total Cove	er	Hydrophytic Vegetation				
	ver of Biotic	Crust		Present?	Yes		No X	
% Bare Ground in Herb Stratum 0 % Co		orust			100		110 /	

Depth	ription: (Describe to Matrix	, nie aek-		edox Featu				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-15"	10YR4/2	100						
refusal at 15"								
					· ·			
					· ·			
					· ·			
¹ Type: C=Co	ncentration, D=Depletion	, RM=Redu	ced Matrix, CS=Cover	ed or Coated	Sand Grains	s. ² Lo	ocation: PL=Pore L	ining, RC=Root Channel, M=Matrix.
Hydric Soil	Indicators: (Applica	able to all	LRRs, unless othe	rwise note	ed.)		Indicators for	r Problematic Hydric Soils ³ :
Histoso	I (A1)		Sandy	Redox (S5)		1 cm Muc	k (A9) (LRR C)
	pipedon (A2)			ed Matrix (S	,			k (A10) (LRR B)
	istic (A3)			Mucky Min				Vertic (F18)
	en Sulfide (A4)			Gleyed Ma				nt Material (TF2)
	d Layers (A5) (LRR C	•)		ed Matrix (F	-		Other (Ex	plain in Remarks)
	uck (A9) (LRR D) d Below Dark Surface	- (A11)		Dark Surfa ed Dark Su	· · ·			
	ark Surface (A12)	= (ATT)		Depressior	· · ·		³ Indicators of	hydrophytic vegetation and
	Mucky Mineral (S1)			Pools (F9)				/drology must be present,
	Gleyed Matrix (S4)						-	turbed or problematic.
	• • • •							•
	l aver (if present):							
Restrictive	Layer (if present):							
Restrictive Type:						F	Ivdric Soil Prese	ent? Yes No X
Restrictive Type: Depth (inc	hes):						Hydric Soil Prese	
Restrictive Type: Depth (inc Remarks: N	hes): lo hydric soil indicator	s were obs	served. The soil pit v			nel which ha	as a defined bec	and bank. The soil type for the surv
Restrictive Type: Depth (inc Remarks: N area is mapp	hes): lo hydric soil indicator	s were obs y. Howeve	served. The soil pit v r, courser sandy pa	rticles (map	oped as Ca	nel which ha rlsbad grave	as a defined bec elly sandy loam)	and bank. The soil type for the surv could have been transported from
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(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No primary wetland hydrology indicators observed.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Spectrum Pedestrian Bridge	City/County: San Diego, Sar	n Diego		Sampling Date: 8.14.18
Applicant/Owner: Alexandria Real Estate Equities, Inc.		State:	CA	Sampling Point: 3
Investigator(s): B. Procsal	Section, Township, Range:	Del Mar	quadrangle	e, Pueblo Lands of SD landgrant
Landform (hillslope, terrace, etc.): drainage	Local relief (concave, conve	ex, none):	concave	Slope (%): 0-2
Subregion (LRR): LRR-C Lat: 32.9	00585 Lon	ıg: <u>-117.24</u>	0484	Datum: NAD 83
Soil Map Unit Name: Altamont clay, 30 to 50 percent slopes		NWI c	lassificatio	n: Riverine
Are climatic / hydrologic conditions on the site typical for this time of year	r?Yes <u>X</u> No	(If no,	explain in	Remarks.)
Are Vegetation, Soil, or Hydrologysignifican	tly disturbed? No Are "N	Iormal Circ	umstance	s" present? Yes X No
Are Vegetation, Soil, or Hydrologynaturally	problematic? No (If nee	eded, expla	in any ans	wers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No X				
Hydric Soil Present?	Yes	No X	Is the Sampled Area within a Wetland?	Yes	No X	
Wetland Hydrology Present?	Yes	No X				
Remarks: Where vegetated, the dra	inage is domi	nated by non-native p	ampas grass and its leaf litter.			

VEGETATION – Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test worksh	ieet:		
<u>Tree Stratum</u> (Plot size:) 1	-	Species?	Status	Number of Dominant Spe That Are OBL, FACW, or		0	(A)
2				Total Number of Dominar Species Across All Strata		1	(B)
4.			er	Percent of Dominant Spe That Are OBL, FACW, or		0	(A/B)
Sapling/Shrub Stratum (Plot size:)						
1. Cortaderia selloana	50	Ν	FACU	Prevalence Index works	heet:		
2.				Total % Cover of:	M	ultiply by:	
3.				OBL species	x 1 =		
4.				FACW species	x 2 =		
5.		·		FAC species	x 3 =		
	50	= Total Cove	er	FACU species 50	x 4 =	200	_
Herb Stratum (Plot size:)		-		UPL species	x 5 =		_
1				Column Totals: 50	(A)	200	(B)
2.				Dervelan er hedere			_
3.				Prevalence Index	= B/A = <u>4.0</u>		
Λ				Hydrophytic Vegetation	Indicators:		
5.				Dominance Test is			
6.				Prevalence Index is			
7.				Morphological Ada	otations ¹ (Pr	ovide supr	oortina
8.				data in Remarks			
		= Total Cov	/er	Problematic Hydror	ohvtic Veget	ation ¹ (Exr	olain)
Woody Vine Stratum (Plot size:)	-					,
1.				¹ Indicators of hydric soil	and wetland	hvdroloa	/ must
2.		·		be present, unless distur			
		= Total Cove	er	Hydrophytic			
% Bare Ground in Herb Stratum 50 % C	Cover of Biotic	c Crust		Vegetation Present? Yes	j	No <u>X</u>	
Remarks: Vegetation is not hydrophytic.							

Sampling Point: 3

	. Natrix	•	needed to docum	edox Featu		commit		f mulcators.	,	
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
-11"	10YR5/3	100	, <i>i</i>				sand	compacte	ed and dry	
efusal at								· · · · ·		
1"		·								
		·								
		·								
	ncentration, D=Depletion		ad Matrix, CS=Cauara	d ar Caatad	Cand Crain	- 2	l agation: DI -D		Post Channel M-	Matrix
	Indicators: (Applica					5.		-	Root Channel, M=l	
Histosol				Redox (S5)				Muck (A9) (LF	-	
	pipedon (A2)			d Matrix (S				Muck (A3) (L	,	
Black Hi				Mucky Min	,			ced Vertic (F1		
	en Sulfide (A4)			Gleyed Ma				Parent Materia	,	
	d Layers (A5) (LRR (?)		d Matrix (F				(Explain in Re	()	
	uck (A9) (LRR D)	-)		Dark Surfac	,		0			
	d Below Dark Surface	ρ (Δ11)		d Dark Sur	· · /					
	ark Surface (A12)	0 (/ (11)	·	Depression	()		³ Indicator	s of hydrophyti	ic vegetation an	d
	Aucky Mineral (S1)			Pools (F9)	3 (1 0)				nust be present,	
	• • • •			0013 (1 0)				, .,	•	
	Gleyed Matrix (S4)						unless	s disturbed or p	propiematic.	
Sandy G							unless	s disturbed or p		
Sandy G	Layer (if present):						unless	s disturbed or p		
Sandy G estrictive L Type:	Layer (if present):									
Sandy G estrictive L Type: Depth (inch	Layer (if present):			as dug witi	hin a chan	nel which	Hydric Soil P	Present?	Yes I	No X
Sandy G estrictive L Type: Depth (inch emarks: No ea is mapp	Layer (if present):	rs were obso by. However	erved. The soil pit w , courser sandy part	ticles (map	ped as Ca	rlsbad gra	Hydric Soil P has a defined avelly sandy lo	resent?	Yes I	or the surv
Sandy G estrictive L Type: Depth (inch emarks: No ea is mapp hen develop DROLOG	Layer (if present): hes): o hydric soil indicator bed as Almamont Cla pment occurred west	rs were obso y. However t of the prop	erved. The soil pit w , courser sandy part	ticles (map	ped as Ca	rlsbad gra	Hydric Soil P has a defined avelly sandy lo soil at this loca	resent? ۲ bed and bank هm) could hav tion	Yes I k. The soil type f ve been transpor	for the surv
Sandy G strictive L Type: Depth (inch emarks: No ea is mapp nen develop DROLOG Vetland Hy	Layer (if present): hes): o hydric soil indicator ped as Almamont Cla pment occurred west GY rdrology Indicators:	rs were obso y. However t of the prop	erved. The soil pit w , courser sandy part erties and/or may b	ticles (map e unmappe	ped as Ca	rlsbad gra	Hydric Soil P has a defined avelly sandy lo soil at this loca	Present?) bed and bank am) could hav tion econdary Indi	Yes I c. The soil type f /e been transpor cators (2 or mo	or the surv rted from
Sandy G strictive L Type: Depth (inch emarks: No ea is mapp ien develop DROLOG /etland Hy rimary India	Layer (if present): hes):	rs were obso y. However t of the prop	erved. The soil pit w , courser sandy part perties and/or may b d; check all that appl	ticles (map e unmappe y)	ped as Ca	rlsbad gra	Hydric Soil P has a defined avelly sandy lo soil at this loca	Present?) bed and bank (am) could hav (tion (becondary Indiana) (becondary Indiana) (becondary Indiana)	Yes I k. The soil type f ve been transpor cators (2 or mo s (B1) (Riverine	or the surv rted from pre require
Sandy G strictive L Type: Depth (inch marks: No ea is mapp nen develop DROLOG /etland Hy rimary India	Layer (if present): hes):	rs were obso y. However t of the prop	erved. The soil pit w , courser sandy part perties and/or may b <u>d; check all that appl</u>	ticles (map e unmappe y) st (B11)	ped as Ca	rlsbad gra	Hydric Soil P has a defined avelly sandy lo soil at this loca	Present? bed and bank bam) could hav tion econdary Indi Water Marks Sediment De	Yes I c. The soil type f ve been transport cators (2 or mo s (B1) (Riverine eposits (B2) (Riv	or the surv rted from pre require) verine)
Sandy G strictive L Type: Depth (inch marks: No ca is mapp nen develop DROLOG Vetland Hy rimary India Surface High Wa	Layer (if present): hes): o hydric soil indicator bed as Almamont Cla pment occurred west GY rdrology Indicators: cators (minimum of c Water (A1) ater Table (A2)	rs were obso y. However t of the prop	erved. The soil pit w , courser sandy part verties and/or may b <u>t; check all that appl</u> Salt Crus Biotic Cru	ticles (map e unmappe y) ut (B11) ust (B12)	ped as Ca	rlsbad gra	Hydric Soil P has a defined avelly sandy lo soil at this loca	Present? bed and bank pam) could hav tion econdary Indi _ Water Marks _ Sediment De _ Drift Deposit	Yes I x. The soil type f ye been transport cators (2 or mo s (B1) (Riverine eposits (B2) (Riverine s (B3) (Riverine	or the surv rted from pre require) verine)
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Saturation Water M Sufface Mathematical Math Mathematical Mathemat	Layer (if present): hes):	rs were obso y. However t of the prop one required ine) nriverine) rine) magery (B7	erved. The soil pit w , courser sandy part perties and/or may b d; check all that appl 	y) (Interpret of the second s	ped as Ca ed inclusio es (B13) dor (C1) eres along ed Iron (C4 ion in Tille (C7)	rlsbad gra ns in the s Living Ro 4)	Hydric Soil P has a defined avelly sandy lo soil at this loca	Present? Note: Not	Yes I c. The soil type f ye been transpor- cators (2 or model) (Riverine eposits (B2) (Riverine s (B3) (Riverine titerns (B10) Water Table (C Surface (C7) rows (C8) 'isible on Aerial I itard (D3)	or the surv rted from ore require) verine) a) 2)
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Remarks: No hydrology indicators observed.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Spectrum Pedestrian Bridge 0	ounty: San Diego, San Diego Sampling Date: 7.30.21
Applicant/Owner: Alexandria Real Estate Equities, Inc.	State: CA Sampling Point: 4
Investigator(s): B. Procsal	on, Township, Range: Del Mar quadrangle, Pueblo Lands of SD landgrant
Landform (hillslope, terrace, etc.): drainage	l relief (concave, convex, none): concave Slope (%): 0-2
Subregion (LRR): LRR-C Lat: 32.90	Long: -117.240678 Datum: NAD 83
Soil Map Unit Name: Altamont clay, 30 to 50 percent slopes	NWI classification: Riverine
Are climatic / hydrologic conditions on the site typical for this time of year	es X No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrologysignificant	turbed? No Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrologynaturally p	matic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X No Yes No X Yes No X	Is the Sampled Area within a Wetland?	Yes	NoX	
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Remarks: Sample point in southern riparian scrub. Where vegetated, the understory is dominated by non-native pampas grass and it's leaf litter.

VEGETATION – Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Tes	t worksheet	:		
Tree Stratum (Plot size:) 1. Salix lasiolepis)	<u>% Cover</u> 100	Species? Yes	Status FACW	Number of Domi				(
	100	165	TACIN	That Are OBL, F	,	J:	1	_(A)
2				Total Number of Species Across A				
3				•			2	(B)
4				Percent of Domir That Are OBL, F			50%	(A/B)
		= Total Cove	er	mat vie OBE, 17		J	0070	
Sapling/Shrub Stratum (Plot size:)								
1. Cortaderia selloana	5	N	FACU	Prevalence Inde		et:		
2.				Total % Cov	er of:	Mu	Iltiply by:	
3.				OBL species		x 1 =		_
4.				FACW species	100	x 2 =	200	
5.				FAC species		x 3 =		
	5	= Total Cove	er	FACU species	5	x 4 =	20	
Herb Stratum (Plot size:)				UPL species		x 5 =		
1.				Column Totals:	105	(A)	220	(B)
2.								
3				Prevalen	ce Index = B/	A = <u>2.10</u>		
4.				Hydrophytic Ve	getation Ind	licators:		
5					e Test is >50			
6.				X Prevalence				
7.					ical Adaptati		wide supp	orting
Q					Remarks or o			
0		= Total Cov	/or	Droblomati	ic Hydrophyti	io Voqoto	tion ¹ (Evn	
Woody Vine Stratum (Plot size:)		- 10tal 001			спушорнуц	ic vegeta	auon (Exp	iairi)
1.				¹ Indicators of hy	dria apil and	watland	hudrologu,	must
· · · · · · · · · · · · · · · · · · ·				be present, unle			, ,,	musi
2				, ,				
		= Total Cove	er	Hydrophytic Vegetation				
% Bare Ground in Herb Stratum 50 % Co	over of Biotic	Crust		Present?	Yes	Х	No	
Remarks: Arroyo willow dominated vegetation in area	n immmedia	ate vicinity of s	storm drain o	utflow. This area is	well defined	by very s	teep cany	on slopes

Remarks: Arroyo willow dominated vegetation in area in immediate vicinity of storm drain outflow. This area is well defined by very steep canyon slopes and is somewhat bowl-shaped. The area is dominated by hydrophytic vegetation. SOIL

Sampling Point: 3

Depth	Matrix			Re	edox Feat	ures		he absen			
(inches)	Color (moist)	%	Color	r (moist)	%	Type ¹	Loc ²	Text	ure	Rema	arks
)-2"	10YR 2/2	100						sand			
2-18"	10YR 3/1	100						sand			
						- <u> </u>					
						- <u> </u>					
<i>.</i>	entration, D=Depletion						s. ² l		0.	RC=Root Channe	
-	ndicators: (Applic	able to all L	RRs, u							lematic Hydri	c Soils':
Histosol (,		_		Redox (S5	,			cm Muck (A9)		
	pedon (A2)		-		d Matrix (S	-			cm Muck (A10		
Black Histic (A3) Hydrogen Sulfide (A4)					Mucky Mir Gleyed Ma				educed Vertic ed Parent Mat	· · ·	
Stratified Layers (A5) (LRR C)					d Matrix (I				ther (Explain i	()	
	ck (A9) (LRR D)	- /	-		Dark Surfa	,			and (Extension		
	Below Dark Surfac	e (A11)	_	Deplete	d Dark Su	rface (F7)					
Thick Dark Surface (A12)				Redox [Depressio	ns (F8)		³ Indica	ators of hydrop	hytic vegetatio	on and
Sandy Mucky Mineral (S1)			_	Vernal Pools (F9) w				tland hydrolog	gy must be pre	sent,	
Sandy Gl	eyed Matrix (S4)							un	less disturbed	or problemation).
estrictive L	ayer (if present):										
Туре:											
Depth (inch	hydric soil indicato						canopy ne	ar channe			
Depth (inch emarks: No bil type for th een transpor	hydric soil indicato e survey area is ma ted from when deve	apped as Al	mamont	Clay. Howe	ever, cours	er sandy p	canopy ne articles (m	ar channe apped as	l originating fr Carlsbad grav	om a storm dra /elly sandy loa	ain outflow. The m) could have
Depth (inch emarks: No bil type for th een transpor	hydric soil indicato e survey area is ma ted from when deve	apped as Al	mamont	Clay. Howe	ever, cours	er sandy p	canopy ne articles (m	ar channe apped as	l originating fr Carlsbad grav	om a storm dra /elly sandy loa	ain outflow. The m) could have
Depth (inch emarks: No bil type for th een transpor	hydric soil indicato e survey area is ma ted from when deve	apped as Al elopment oc	mamont	Clay. Howe	ever, cours	er sandy p	canopy ne articles (m	ar channe apped as	I originating fr Carlsbad grav sions in the so <u>Secondary</u>	om a storm dra velly sandy loa bil at this location	ain outflow. The m) could have on. or more require
Depth (inch emarks: No bil type for th een transpor DROLOG	hydric soil indicator e survey area is ma ted from when deve	apped as Ali elopment oc	mamont curred w	Clay. Howe vest of the p	ever, cours properties	er sandy p	canopy ne articles (m	ar channe apped as	I originating fr Carlsbad grav sions in the so <u>Secondary</u>	om a storm dra /elly sandy loa ill at this locatio	ain outflow. The m) could have on. or more require
Depth (inch emarks: No bil type for th een transpor DROLOG DROLOG Vetland Hyd Primary Indic Surface N	hydric soil indicator e survey area is ma ted from when deve Y Irology Indicators ators (minimum of o Water (A1)	apped as Ali elopment oc	mamont curred w	Clay. Howe vest of the p all that appl Salt Crus	ever, cours properties (y) et (B11)	er sandy p	canopy ne articles (m	ar channe apped as	I originating fr Carlsbad grav sions in the sc Secondary I Water M Sedimen	om a storm dra velly sandy loa bil at this location Indicators (2 of arks (B1) (Rive It Deposits (B2	ain outflow. The m) could have on. or more require erine)) (Riverine)
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Remarks: Only one secondary hydrology indicator observed after searching.

ATTACHMENT 6

Easement Exhibit



EASEMENT ENCROACHMENT:

THE PROPOSED AREA OF WORK (INCLUDING TEMPORARY CONSTRUCTION A ALONG THE NORTHERN PORTION OF PARCEL ADDRESSED 3545 CRAY COURT ENCROACHES INTO THE OPEN SPACE EASEMENT BY 0.08 ACRES AS PART OF THE ENCROACHMENT STATED ABOVE; THE PROPOSED BRIDGE AND PATH ENCROACH BY <u>0.01 ACRES</u>



HITECTURE ENGIN ANDSCAPE ARCHITECTURE

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Job Number 1808910 Date Published 2021.01.19 Checked By Checker Scale As indicated

EASEMENT EXHIBIT

G0.27

	LEGEND
PL	PROPERTY LINE
	SETBACK LINE
	AREA OF DISTURBANCE - LIMIT OF WORK
	ACCESSABILITY ROUTE
>	DRAINAGE
0 ^{+XXX X}	SPOT ELEVATION
HEN	(E) FIRE HYDRANT
	(E) TRANSIT STOP
	EXISITING BUILDINGS
	NEW BUILDINGS UNDER CONSTRUCTION/RENOVATION
	OPEN SPACE EASEMENT
	EXISTING PATH
	NEW PATH TO BRIDGE
	AREA ENCROACHING INTO EASEMENT

KEY PLAN





GENERAL NOTES

EASEMENT ENCROACHMENT:

THE PROPOSED AREA OF WORK (INCLUDING TEMPORARY CONSTRUCTION AI ALONG THE NORTHERN PORTION OF PARCEL ADDRESSED 3645 CRAY COURT ENCROACHES INTO THE OPEN SPACE EASEMENT BY 0.08 ACRES

AS PART OF THE ENCROACHMENT STATED ABOVE; THE PROPOSED BRIDGE AND PATH ENCROACH BY $\underline{0.01 \ ACRES}$



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Job Number 1808910 Date Published 2021.01.19 Checked By Checker Scale As indicated

EASEMENT EXHIBIT



	LEGEND
PL	PROPERTY LINE
	SETBACK LINE
	AREA OF DISTURBANCE - LIMIT OF WORK
	ACCESSABILITY ROUTE
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	(E) TRANSIT STOP
	EXISITING BUILDINGS
	NEW BUILDINGS UNDER CONSTRUCTION/RENOVATION
	OPEN SPACE EASEMENT
	EXISTING PATH
	NEW PATH TO BRIDGE
	AREA ENCROACHING INTO EASEMENT
	KEY PLAN





EASEMENT ENCROACHMENT:

GENERAL NOTES

THE REPORTED ASEA OF WORK (INCLUDED TEMPORARY CONSTITUCTION APEA HOW OF THE WORK THE WORK (INCLUDED ASEA OF WORK COUNT EXCROLAGEES AND THE OPEN SPACE EASEMENT BY <u>LON ADRES</u> AS PART OF THE EXCROLAGHERT STATED ABOVE. THE PROPOSED BRIDGE AND PATH ENCROLAGHERT SULTABLES



KEY PLAN





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DLPA. Inc

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Date	04/16/2020	07/10/2020	01/19/2021	03/26/2021	08/09/2021			
Submittal	SDP, PDP, CDP - 1st CITY SUBMITTAL	SDP, PDP, CDP - 2nd CITY SUBMITTAL	SDP, PDP, CDP - 3RD CITY SUBMITTAL	SDP, PDP, CDP - 4TH CITY SUBMITTAL	SDP, PDP, CDP - 5TH CITY SUBMITTAL			
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